

volume 41

Sci-fi & fantasy

modeller

Moebius Dawn of Justice Batmobile



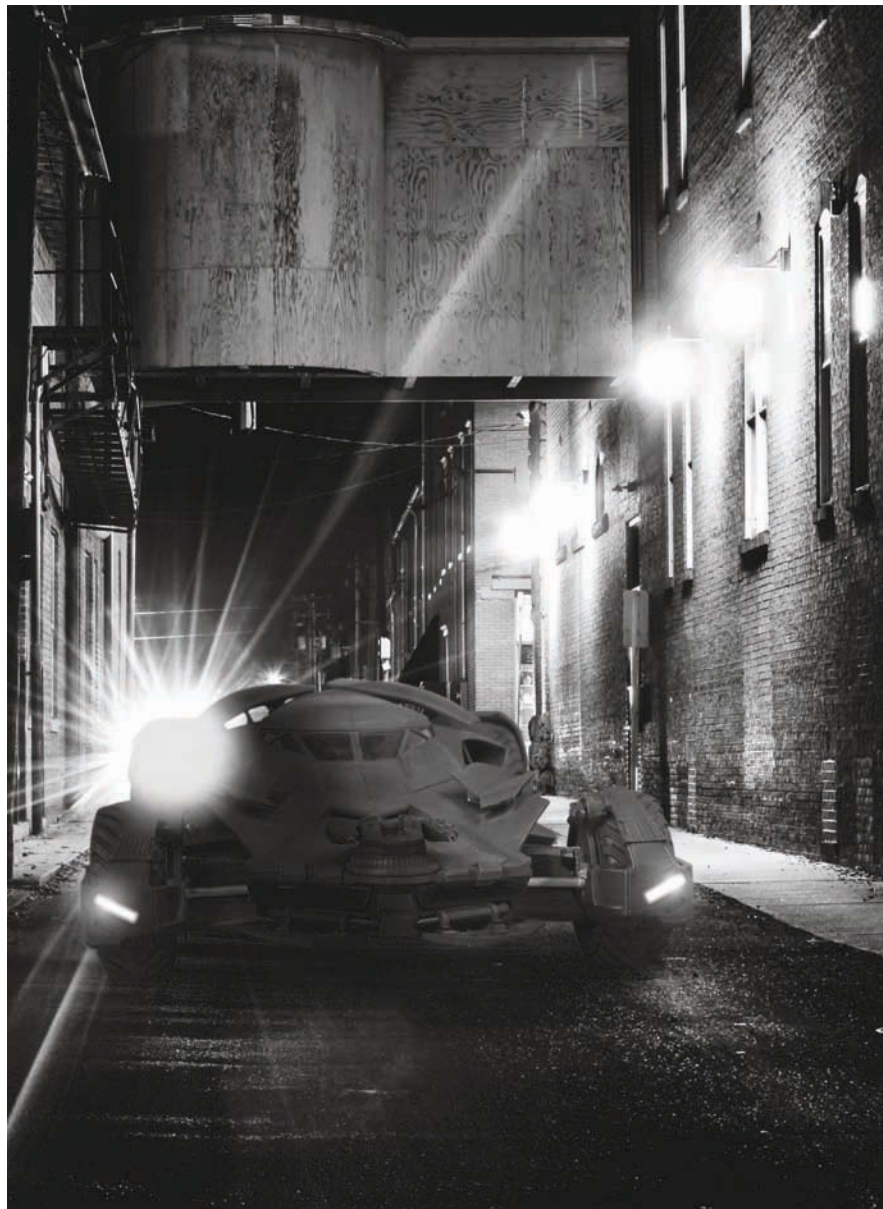
Blake's 7 London • Force Awakens • Stingray Terror Fish

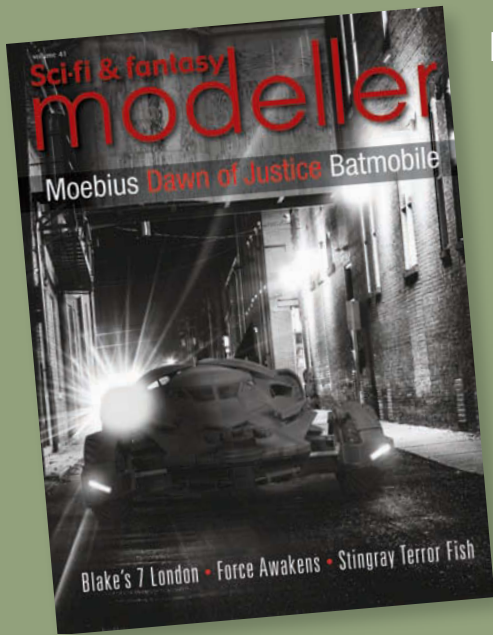
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THIS VOLUME IS DEDICATED TO THE MEMORY OF
SYLVIA ANDERSON – 1927-2016.

Sci-fi & fantasy modeller

Volume 41





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Sci-fi & fantasy modeller

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VOLUME 41 EDITORIAL

As I type this our *Modelling the Eagle* special has proven to be our most sought after hobby publication ever in the twenty-plus years that David and myself have been working together (well over 100 editions and specials to date... where *has* the time gone? Hair... I... remember... *Hair!*...).

As regular readers will know I'm a huge admirer of the *Eagle* (a forty-three year love affair which prompted development of *MTE* in the first place) and it's therefore extremely satisfying to see so many of you enjoying our celebration of Brian Johnson's iconic spaceship.

Space:1999 was an epic show (particularly in its first year) and had 'classic design' written right through it, from props and sets through to miniatures and effects and, spurred on by the series' unique look and the

popularity of *MTE*, we've begun work on a labour-of-love sequel – **Modelling: 1999** – which is set to publish on or around *September 13* this year (series' fans will recognise the significance of the date).

1999

We're in the early stages of production at the moment, but watch our site for updates and a pre-order offer soon.

Meanwhile, as you hopefully look forward to **Modelling: 1999** as much as we're looking forward to putting it together, here's a whole new issue of the very best in SF modelling to dive into...

Thank you, as always, for joining us. Look forward to meeting you, right here, in 90.

Michael G. Reccia
Editor-In-Chief



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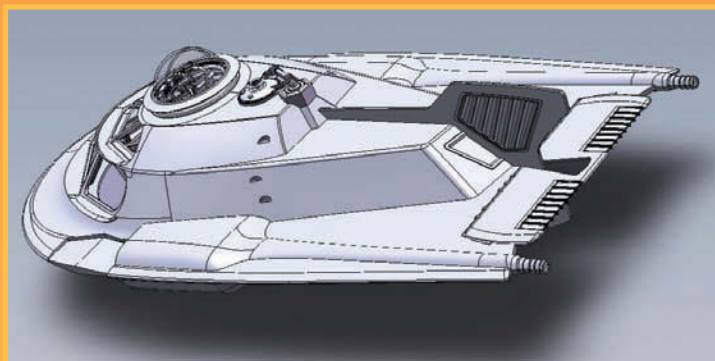
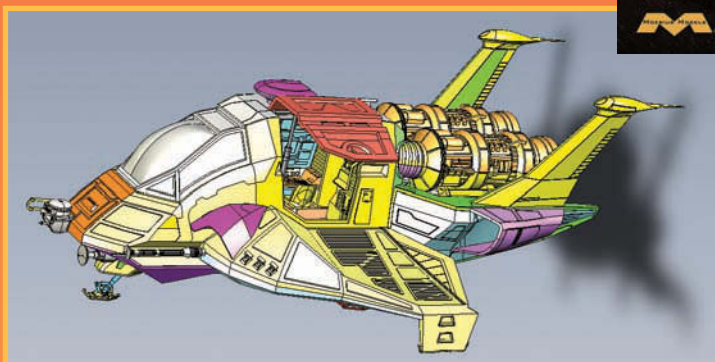
HOT FROM THE MOULD

ROUNDING UP WHAT'S NEW AND HAPPENING IN SF AND FANTASY MODELLING

MOEBIUS

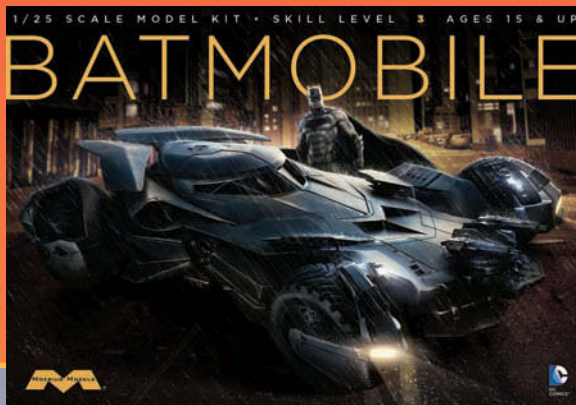
There's a whole shelf-full of exciting releases to anticipate from *Moebius* this year...

A New Battlestar Galactica 1:32 scale *Raptor* kit plus a 1:32 *Proteus* submarine with interior from the 1966 classic movie *Fantastic Voyage* (around 16 inches long) will be available from *Moebius* later in 2016. Expect test shot builds of these two new kits in upcoming volumes of this title.



BvS Batmobile

Now available (see test shot review this issue), the new *Batmobile* kit will also be offered as a pre-finished



(assembled and painted) version *Comic-Con exclusive*, released this summer, presented in a pedestal display box, similar to the company's treatment of *Catwoman on Bat-Pod* in 2014 and *Krypto* in 2015. A *Batwing* kit from the movie will also follow sometime this year...

BvS Batman and Superman

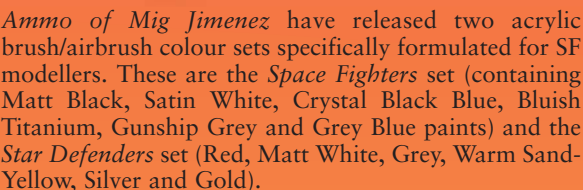
Scheduled for summer release are these highly-detailed 1/8 scale resin figure kits based on digital effects files and featuring *Batman* in his armoured batsuit from the movie. A *Wonder Woman* figure addition to the series is also in the works...



Batman Classic TV Series Robin

The third release in *Moebius'* classic *Batman* figure kit series – *Robin* – is back underway after some technical glitches at the 3D *SolidWorks* stage that delayed the project considerably. The kit should make an appearance late spring/early

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www.moebiusmodels.com



CENTURY CASTINGS

Comlock and Stun Gun (Space:1999 Props and Ships Group kit)



©Alex Jackson 2016

Three 1:1 scale Space:1999 prop kits are now available from Century Castings: a Comlock, a Comlock Desk Holder and an Alpha Stun Gun. The Comlock features kiss cut decals

printed on self adhesive vinyl with anti-fade ink and comes with aluminium side knobs as standard. An upgrade to the Stun Gun kit is also available in the form of an aluminium emitter nozzle and side knobs set by Mike Reader.

Moonbase Alpha building



Additionally, an original 1999 design by Century Castings' Alex Jackson is available in the shape of this cast polyurethane moonbase building in 1:72 scale which is suitable for

complementing 12" Eagle model dioramas. Footprint of the model is A4 size and the height of the walls at the lowest point is 110mm. The kit is easy to assemble and includes mirrored, self adhesive window decals.

Eagle Transporter Hangar



Finally from Century comes this 1:72 kit, again in scale with twelve-inch Eagle models and available as one of two options: with or without floor section.

Full details available by emailing:
centurycastings2014@gmail.com
or visiting
www.centurycastings.co.uk

WILDHOUSE MODELS

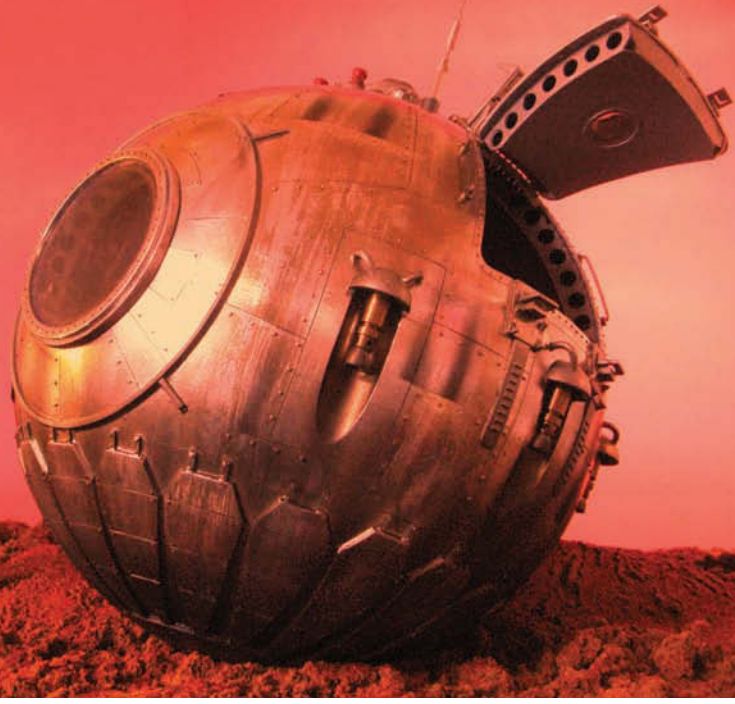
Hover Bike

The latest release from Wildhouse is their 1:32 scale, 170mm long Hover Bike kit featuring 50+ resin and clear parts and a custom A5 decal sheet. The bike can be made up as civilian, military and in flight versions and there are different options for the rider plus two head options: helmet or plain head. A custom lighting kit (optional) for the bike will also soon be available from Wildhouse. Bike kit RRP £85.95.

www.wildhousemodels.com



ALL TIED UP



Steve Howarth creates key miniature and full-size elements for new sci-fi feature 'Tethered'

EVEN THOUGH THIS SCI-FI SHORT HASN'T BEEN COMPLETED YET, JAMES PRICE (ITS MAKER) HAS KINDLY GIVEN ME THE GO-AHEAD TO WRITE AND SUBMIT THIS ARTICLE about my contribution, making three props and the only miniature for this hush-hush project. I can't give anything away regarding the plot, because I don't know it myself!

All I know is that an astronaut is stranded on a Mars-type planet with only a floating robot for company. Said robot, or 'Node' as he is called, is tethered to our protagonist, hence the title, which I hasten to add is a working title and could change. Why the robot is tethered may be a plot device – I don't know. Or maybe it's just left to the audience to guess... maybe this particular model has a history of disobedience (a bug in the software) and has to be tethered to stop it escaping.

All I did know was the feel James was after: a kind of well-worn, retro look. I didn't quite know what these things would end up looking like as I wasn't working from drawings – just a few reference photos of existing objects and phone conversations re the sizes. I was just making them up as I went along and hoped for the best, whilst updating James on a regular basis with pics over the internet. I have reference images in my mind, but if my creative juices take me off topic (as it were), I tend to go with them.

Having a creative bent I get bored quickly, and so, as not to get bored, I alternated between the *escape pod* and the *droid*, but, for ease of reading and writing, I will focus on one at a time.

Escape Pod

'A bit like a *Vostok*,' James said, so I browsed the net for pictures of Russian capsules. Then we decided that the porthole should be bigger than on the *Vostok*'s... after all, it is alternate universe sci-fi and, from a film-maker's standpoint, would give a better view of the landscape from inside the *pod*.

More than a mere *escape pod*, the vehicle also serves as a temporary home whilst on a hostile planet and so is a tad larger than a normal capsule. The finished result is rather workaday, nothing we





haven't seen before, but with a low budget there is a limit to how amazing you can make something look. They say 'limit is the true generator of creativity – not freedom'. I decided to prioritise the time towards realistic details and weathering. Hopefully James can make what I have done look amazing with the direction and the lighting.

Two 12" diameter *EMA* domes would form the basis of the *pod*. Cutting a nice, neat hole for the viewing port would be the first thing to do. I had a pre-formed ring from a child's toy that already had a clear window in it, which was a decent size, so I let this dictate the size of the hole. I elected to mark the circle with a circle cutter and then used

the 'v' groove that that creates to guide my own scribe around a few times. I ground the back edge of a scalpel blade so it cut a flat bottomed trench about .5mm wide and pushed no burr onto the top edges (the grinding of this blade required some experience/confidence... only attempt this if you know what you are doing). About 4 or 5 passes and I was through. The same went for the access panel at the back (as at this stage I was building to camera to save money) which was later to become the extra heat shielding on the bottom. All the panel lines were also done with this custom made blade, but not before drawing them all in pencil first. I lightly sanded the *ABS* 'hemi' to make it more like paper and easier to draw on. It's an extra process, but it's faster than scribing and so you can be more creative and not worry – if you don't like what's been done, just erase it and try again. Lines of longitude and latitude mostly worked for me (and now scribe).

Nice thing about having decent grooves in the material was, when I burnished the aluminium foil





over the top of them, they showed up quite clearly. Then it was a simple matter of letting the groove guide my scalpel as I cut lightly through the foil. Then I could push the overlap each side of the groove into the groove with my fingernail. This is what I did for the entire *pod*. Just prior to applying the foil, however, I did pre-drill all the holes for the ‘rivets’ – dressmakers’ pins – as drilling through foil tends to snag it. Again, rubbing the foil with the flat of your fingernail reveals the holes’ locations, then you can just push the pin in. These were ‘push fit’ so I wouldn’t get involved in a time consuming and potentially messy gluing process, especially when there were so many pins. Gluing each pin from behind wasn’t a realistic option either. These pins were very tight in their holes and weren’t going anywhere.

Each time I completed a patch of foil, I masked it off to protect it. ‘Ally’ foil picks up marks so easily and although a few here and there actually helped the look, I didn’t want the hundreds of marks it would pick up if I didn’t mask. I cut out

the hatch door with the scribe tool as I needed a nice, neat line, scribing around corners using an engineer’s radius gauge to scribe around. I made a pencil mark at the front and the back of the arc so I knew when to stop – pressing the gauge hard enough so it doesn’t move while you’re scribing is the real trick.

The hatch was required in the open or closed position, but was not seen opening or closing, so no working hinges were needed, just a couple of slots and corresponding tabs made from strip styrene. A small window was put in and a couple of handles from bent welding rod and that was it. Both small and large portholes were double-glazed and panes set at the right distance apart, giving the *pod* a believable wall thickness, as it surely would be double-skinned in reality – well, *our* reality. A ring with holes cut out would





bridge the gap of the main porthole. Little did I know I would be making this full size later on. Two found pieces were glued just under the porthole, but were a greasy plastic, probably polypropylene, so needed a dab of P.O. primer before supergluing. *Polyolefin Primer* or *Loctite 770* enables you to superglue together plastics that normally won't stick. It's quite pricey for such a small bottle, but a must for found-object model-makers. The product code on the bottle (see photo) is an *RS Components* number.

For the detail in the upper recess I just did my thing. Unfortunately I only had the bits for two release clamp arms. But, hey, in space there aren't the stresses you get on the ground, so two might have been enough (and clearly were!). Makes for it being a bit different, I suppose.

Weathering the *pod*, I used 'dirty down' spray available from the studio stores – 'mid brown' is favourite. I applied more heavily towards the bottom, where most heat discolouration would occur, taking it back with super fine wire wool

'0000' grade. Also scratching the surface with wet and dry (240/180 grades). I imagined an atmosphere with dust in it (Mars does have some serious dust storms), quite capable of heavily scoring an object passing through it at high speed. Plus, being a Mars *type* planet, it could be even heavier than that.

Node

The *pod* was a very straightforward build compared to *Node* the floating robot, who was also just a sphere (essentially), but with the added complication of me having to glue both halves together and do a lot of work *inside* the sphere as I squeezed my giant meat-hooks through a small access hole cut out for the rear engine. Not unlike the construction of *GERTY* from *Moon*, I was given a camera lens to use for the 'eye' and needed to hook up the iris segments, or, rather, the pin that moved the thin leaves of steel to a mech of some kind. For simplicity and budget's sake, I decided to use cycle brake cables and handles for movement. I also wanted two speed flaps that moved as well, so cables again for these, pulling the





lever for movement and elastic bands (of all things) used for the return force.

Spherical robots are not new (*Portal* and the new *Star Wars* film comes to mind) but any images I found on the internet had a *central* eye, so by making the lens offset, I knew I'd be deviating from this common theme.

At first it looked odd on its own, but as I added more pieces around it, it looked more and more

like it belonged. James couriered a photographic lens which I housed in some *EMA* tube set into the main dome. For the other protuberances I found some nice torch and laser lens housings and set those into tube as well and had them jutting out as if pushing even further forward in its search for information.

Fitting the lens mechanism was a bit tricky, working inside the dome with my large hands. I made most of it *outside* the sphere, then glued it in

at the last minute. I built the mech from *Foamex* as a test, with the intention of repeating it in aluminium, but found to my surprise it was strong enough to do the job. With two pieces glued to form a 'T' section it took the leverage without a problem. Elastic bands completed this low budget solution, looping the band repeatedly until the desired tension was achieved.

I used the same low tech approach for the 'steering flaps' I decided to instal. Something to give a bit more life (over and above the iris movement), *Node* could twitch them randomly, even though they would only be useful at high speed... so I had to make *Node* look like it was capable of high speed by giving him/her/it a huge thruster at the rear. With small steering flaps around its rim and two extra jet nozzles either side for extra lift and umph steering and obvious anti-gravity tech built in, *Node* would be very nimble – were it not tethered to the astronaut.

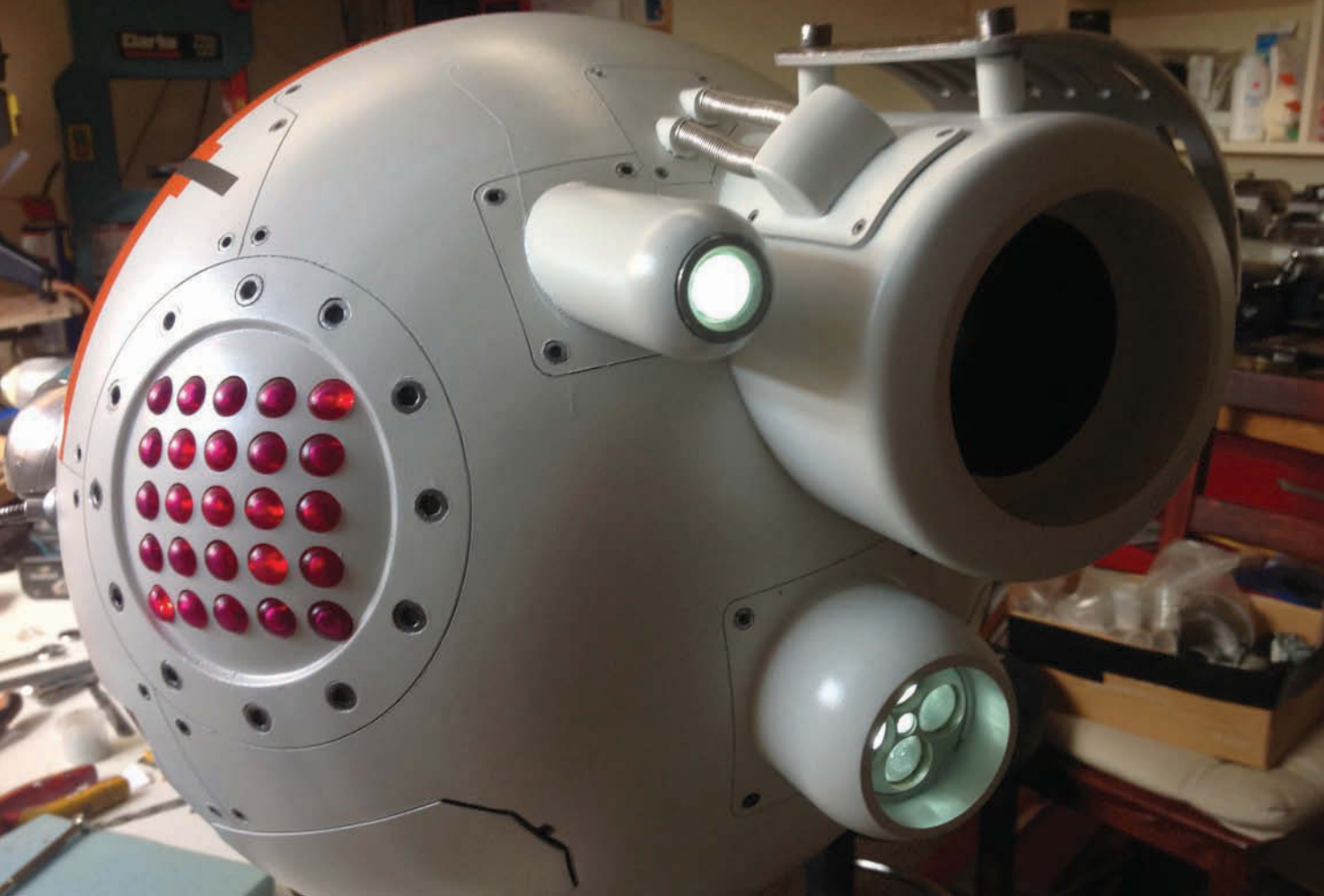
If I find a good object and see a place for it, I'll use it. Unfortunately, I can't tell you what the

radial piece in the engine is because I've had it for so long I've forgotten. ...Probably a vegetable strainer.

Lighting the engine, I soldered lots of 5mm LEDs to two brass rings for both positive and negative connection in parallel. You can see from the photo that no resistors were required. As long as the voltage doesn't go above 4.5 and there are enough milliamps available for it to draw upon, you shouldn't need resistors. That's only if you're using a higher voltage – which I wasn't. For front facing lights, I used actual LED torches and slid them into *EMA* tube of corresponding size. If the fit wasn't perfect, I either slit the tube and stretched it to a bigger diameter or stuck micro-strip inside if it was a tad big. This meant easy change if a bulb blew. All the power comes from outside via wires I soldered into the torches, so no battery changes needed and no drop off in brightness while shooting.

Detailing near the speed flaps, or between the flaps – if you'll pardon the expression – was tricky





in that I *couldn't* really detail between them without whatever I did looking like a mouth. The last thing I wanted, was for *Node* to look like a face.

Retro thrusters were inverted 'shot' glasses (plastic) from the supermarket, with *EMA* half round stuck around and 'ally' foil inside to help with light proofing and bouncing the light around inside. These had

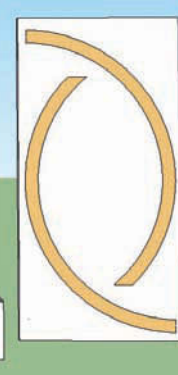
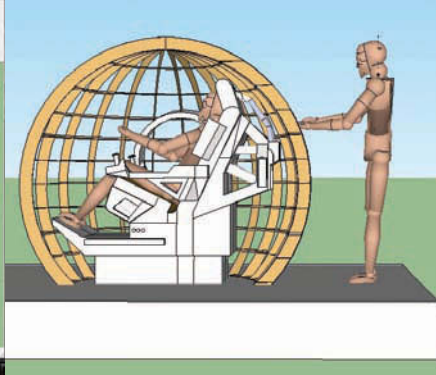
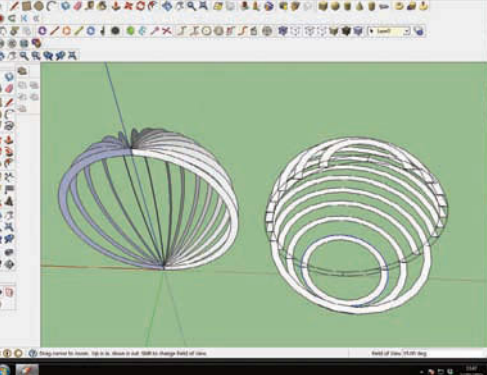
their own little thrust zone set into the main body using pieces of *EMA* tube and were also lined with aluminium foil.

The other interesting found object I used was *Node's* 'brain', as it were.

Car boot sales are a great place to find interesting objects and this next piece was no exception. Looking past the overall shape and





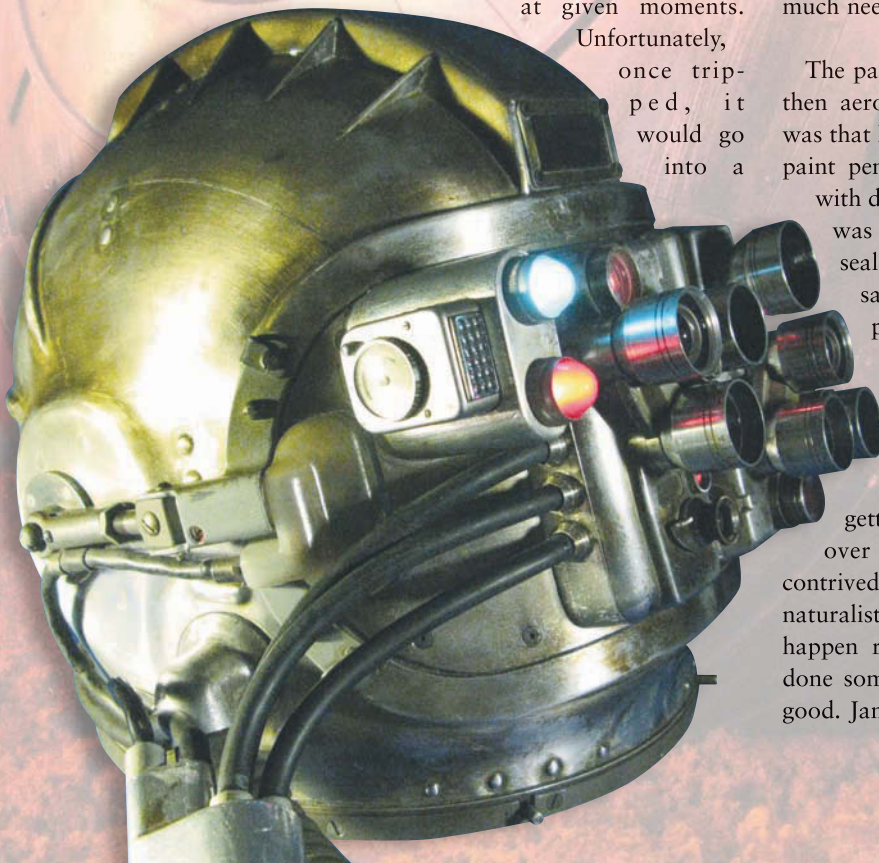


picking out others is key here, as the turtle-shaped child's learning toy is of no use at all, but the electronic part of it, on its back, was luckily of a uniform shape and a dished shape at that. What with the fancy patterns generated by the LEDs (not just random), this was screaming to be incorporated into *Node* as a visual representation of its 'thought' process. James liked this idea, but didn't want it on all the time as it would distract from the iris movement, so it was only to be on at given moments.

Unfortunately, once tripped, it would go into a

loop and wouldn't turn off, so a friend of mine, who's a bit of a whizz with electronics – Dave Forward (who also hosts my website – www.visn.co.uk) – figured out where the reset contacts were on the circuit board. So then, it was a simple matter of running two wires from *Node* and attaching a push switch to it ('s funny, seen removed from the toy, its almost brain-coloured). I think it also balances out the offset eye, almost creating a reason for the eye to be offset, and adds much needed colour to the droid.

The paint job was the usual grey plastic primer then aerosol colours. The difference with *Node* was that I included paint chip effect, using a silver paint pen (rather than the latex method) along with deeper gouges using a scalpel. General dirt was dabbed on powder paint. Once I had sealed the silver paint pen with a coating of satin lacquer, I could drag the powder paint across it without affecting it too, using kitchen roll and lighter fluid (not water, as this dissolves the powder paint – lighter fluid just loosens it mostly, if you're quick). The real trick with this is to be brave and loosen up, getting into that creative zone, as labouring over every scratch can end up looking contrived (as if the whole thing isn't) – a loss of a naturalistic look, if you like. In reality, things happen randomly, so even if you think you've done something heavy-handedly, it can still look good. James did want *Node* to look battered and



scratched as if this wasn't its first tour of duty. I thought it might look cool if it looked like these droids were capable of speed... maybe they were allowed to scout far ahead and then zip back and report, or bring back samples, but because of an inherent hardware problem, later had to be tethered. I usually build a feature then think of a reason for it afterwards, to be honest. As it turned out further conversation with James revealed that's not the kind of history he had in mind, so speed was never needed, meaning my design features were redundant. Still, James still liked the look of *Node*, so no harm, no foul.

Helmet

James sent me a Russian G-suit helmet as a starting point. Used quite a lot in B-movie sci-fi films and shorts due to their availability (via the internet) and reasonable price. To disguise this recognisable object, some heavy dressing was needed. In an ideal world sculpted and cast pieces would be attached to change the shape, but instead we discussed a cheaper solution, so James sent me

a selection of second-hand cine cameras, which I said I would use to obliterate the visor. My plan was to cover the visor (which, when you looked closely, had filaments laminated into it, like the heated rear window on a car!) with thin sheet aluminium and then bolt various lens arrays onto that from inside. James liked this idea, so he let me run with it. I sent photos to him, holding pieces in position, before committing to attaching them.

After choosing the cameras I was going to use, it was a case of hacksawing off the front ends and filling in the hollows with *P40* – a polyester filler with chopped strands of glass-fibre already mixed into it – as I needed something solid to work with. The angle I was attaching the piece at meant a helpful little strip of styrene glued to the camera that I could break off later. I covered the screen in parcel tape as a release agent. Once hardened, I would drill into the back of the camera and set in some threaded 'ally' sleeves for the bolts. My main worry with the job was how the screen would behave when being drilled into. Not knowing





what kind of plastic but suspecting it was a kind of acrylic, I made sure any drills I used were ‘backed off’. This means grinding off the leading edges of the tip of the drill on the grinding wheel, an old trick that helps prevent the drill being pulled through the material abruptly and shattering the hole. Not that a few chips would have mattered, but this could cause a full-blown crack. Not something I wanted to happen. As it happened it was fine and, with a little WD40 as lubricant, drills and hole saws cut through no problem.

I made everything removable for access, changing bulbs, or repairing damages, a discipline I picked up during my time at *Modern Props LA*.

Wanting to disguise it further and throw the eye, I installed lots of cables that went across the line of the visor. What with the final busyness and illuminated lenses, I think it seriously detracts from what’s underneath.

One lens didn’t have a bulb behind it – just a hole – so as to give the actor something to see out of. After checking the visibility out myself, it was time to weather the helmet. For this I used ‘dirty down’ spray from the studio stores – ‘mid brown’ dabbed with lighter fluid, but not before spending many hours and elbow grease removing the anodised green colour from the aluminium that I found underneath the two layers of paint, which themselves required two tins of paint stripper to remove.

Escape Pod interior

Having made the miniature for this and having had some experience with making full size props, I managed to convince James to fund me to make the interior set, or the basic bones of it, anyway. Obviously, this was going to be too big for my

regular workshop, but there was plenty of room downstairs and no-one to say, ‘You can’t put that there! Where’s the dining table going to go?’ Still, with great consideration, I stapled polythene sheeting where I could, to stop dust travelling, and placed two sheets of plywood over the carpet to stop me treading the stuff in. I don’t want to lose my deposit, after all.

Getting it out of the flat was another consideration, so I knew instantly that this would be in four segments. I hasten to add, only *half* of the pod was being made (budget, of course). The camera would be placed so the *illusion* of a full sphere took place.

Firstly, I drew up a skeleton of the sphere in *Sketchup*, with plywood ribs being a reasonable distance, so as to give that spherical feel. Curved in the vertical plane, yet in the horizontal plane it would be a series of flats. There’s no reason why the exterior can’t be a perfect sphere and the interior faceted... this was double-skinned, after all. To this effect I was going to show this wall thickness with a double-glazed porthole, with each pane of ‘glass’ in line with each ‘skin’ layer, as it were (*PET-G*, as it’s known in the trade, would be the material of choice for the ‘glass’, still with its protective cover on in most of the photos.).

Before cutting anything I also made sure the proportions of porthole/*pod* were correct, so that James could cut between the set and the miniature without a noticeable jump, so I superimposed a photo of the *pod* over the *Sketchup* drawing to make sure. Then I used *Sketchup*’s ‘tapemeasure’ tool to give me all the radii I needed for the ribs and measurements for all the intersections where I would do half-lap joints. Then it was a simple case of transferring that info onto 18 sheets of 8 x 4



plywood and jig-sawing it all out. Trammel bars on a length of 2 x 1 gave me a groove, which I then ran a pencil along so I could see the line clearly. I cut bang on the line. I'm pretty good at this, if I'm wearing the right spectacles, so no cleaning was done after the event. The back edge is unseen and the front edge would be covered with *Foamex*. The first one has to be the best, because I'd use that as a template to draw the rest, so I only needed to use the bars once... for the verticals, at least, as they are all the same. The horizontals repeat once either side of the 'equator'.

This worked remarkably well! Thank you, *Sketchup*! I think I would have had a hard time making this without some sort of computer software.

After the first segment was slotted and screwed together (no glue, just in case it needs to stretch a little) I checked it would go downstairs and out of the door. It did... *just...* with millimeters to spare! Four more like this and I had the basic skeleton, which I just screwed together. Next I screwed wide *Foamex* strips between the ribs and superglued narrow strips on top of that, hiding a lot of tiny

screw heads in the process. I left the blue film on to protect the *Foamex* where I could as it damages easily. I glued more strips either side of the *porthole* discs to form a slot that would hold them in place when the two centre segments were screwed together. The inner 'strip' is wider, of course, and has a row of holes pre-cut to match the miniature. A small recess, a ceiling piece and a wall unit were all the budget allowed me to do. James would do the rest... or hire me to dress it on site at a later date, but, for now, this was complete. Not before the mandatory coat of grey plastic primer and making sure the pieces would fit into the van I'd hired to drive down to the location. (Close call, too – the pieces *just* fit.)

Tethered has been a lot of fun 'designing' on the hoof, and I look forward to seeing the finished film some time in 2016. I know that James and his helpers will make these modest models look as good as they possibly can. There may even be more miniatures in the pipeline. That being the case, there'll be another article.

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MOVE AND YOU'RE DEAD!

shouts Thunderbirds model specialist Barry Ford

...THAT'S NOT AN INSTRUCTION, BUT THE NAME OF A CLASSIC THUNDERBIRDS EPISODE FEATURING ALAN AND GRANDMA TRACY trapped on a suspension bridge due to a motion detector that will set off a bomb in typical spectacular Anderson-esque manner. Our intrepid heroes have to neutralise the motion detector device and get Alan and Grandma to safety before the bomb goes off. As part of this action, Brains drives from Thunderbird 2's pod to the location in a tracked vehicle with a transmitter dish, which, in effect, emits a localised electromagnetic pulse that neutralises the motion detector.

Unusually for *International Rescue* this *Neutraliser Vehicle* is quite small and therefore

ideally suited to modelling at 1/35th scale. Both a puppet and model scale version of the vehicle are seen in the episode, though neither in great detail, and there are the inevitable discrepancies between the two – all of which allows me to bring out my artistic license when interpreting the vehicle nearly fifty years after the event.

Truth be told, this is not my first attempt to model the *Neutraliser Vehicle*. Around ten to twelve years ago Imai released a series of resin *International Rescue* figures in 1/35th scale, both as sets of figures and as individual figures boxed with their appropriate vehicles. A standing figure of Brains was packaged with the *Mole*, but the vehicle was one of Imai's smaller, less accurate

early releases. I used this kit with various additions from the spares box and surgically altered *Brains* into a sitting position to create a representation of the *Neutraliser* which, whilst not badly made (if I may say so myself), was a lot smaller than it should have been for the figure teamed up with it.

This model has sat on the shelf collecting dust for many years until recently, when I decided to do something about the size disparity and have another go at building it using the *Brains* figure to dictate the final size of the model and re-using some of the parts, such as the seat and control panel, which were fairly accurate and to the right size.

Comparing my *Brains* figure to photographs of the puppet and model vehicle I was able to determine an approximate size for the model, aided by Graham Bleatham's illustration in the *Haynes Thunderbirds Manual*. The wheels and tracks for the *Neutraliser Vehicle* on the filming model were not from the tractor model often used for pod vehicles, but the wheels and tracks included in Aoshima's 1/72nd scale *Mole* vehicle were the correct size for my model so I decided that I would make use of them by playing my

artistic license card, justified by the fact that it is from the same design philosophy.

Whilst the correct length, the *Mole* tractor unit has a sloping top, so these sections were cut off and levelled using plastic strip as support and *plasticard* to infill the centre section. I built up from this base using more *plasticard*, plastic channel sections and parts from my spares box that I will let kit-watchers have fun with in determining their origin for themselves. My original 'cabin' area only needed minor modifications, although it did require a plinth with curved ends to sit on, which was created using *plasticard* formers and strip sections. I had estimated the size of the transmitter dish, but did not create it at this moment in time as I wanted to finish building and painting the tractor before handling the more delicate, breakable parts. Once I was happy with the shape, size and detail of the tractor unit, including the ubiquitous girder bridge parts, I gave the model a coat of grey primer to act as a base for the main coat of paint and to highlight any obvious defects. I find this to be a very satisfying moment in any scratchbuild as this is the first time the eclectic collection of parts starts looking like a cohesive whole.

1 - 4: the original model.

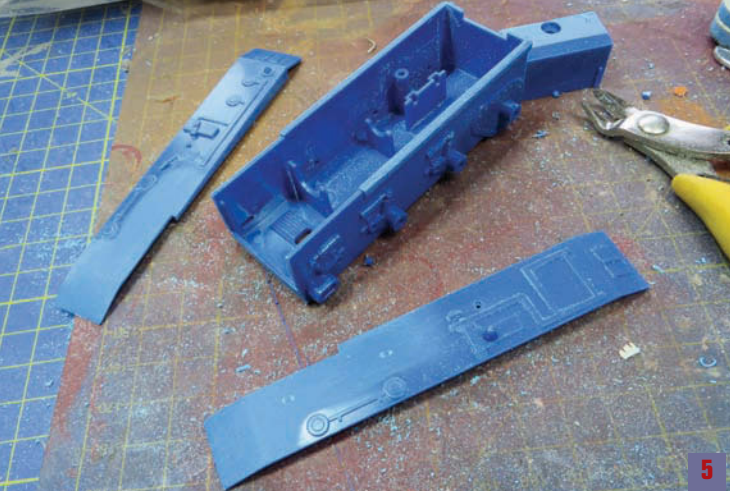
5: the *Mole* kit dismembered.

6 - 7: my new tractor unit.

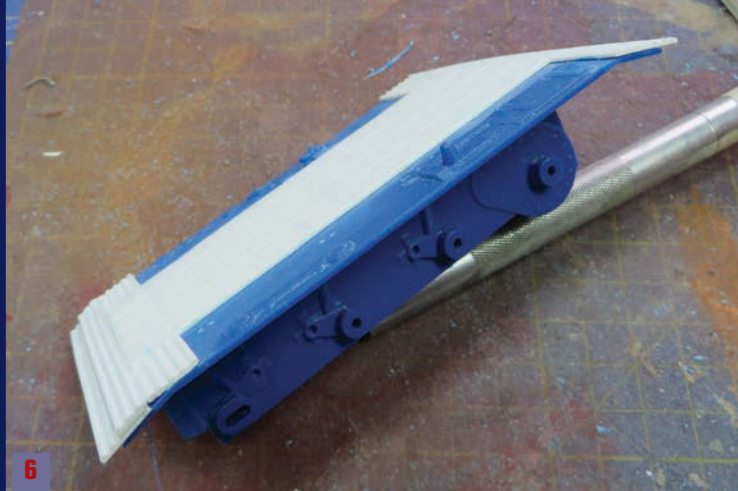
8: detailing is added...

9 - 12: ...and completed.

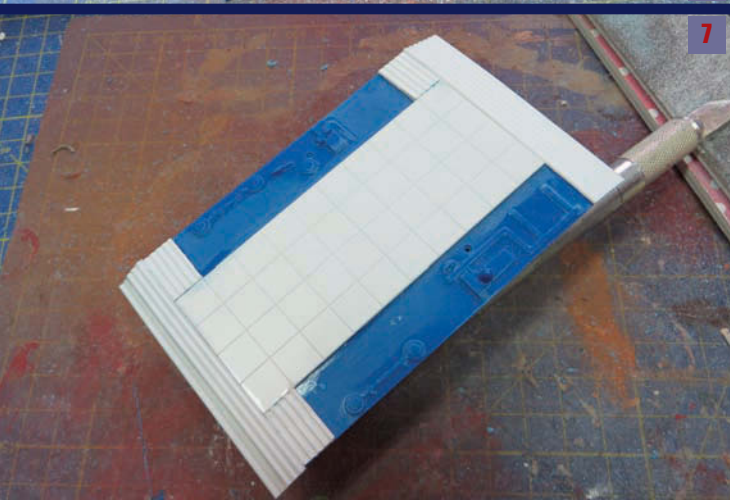




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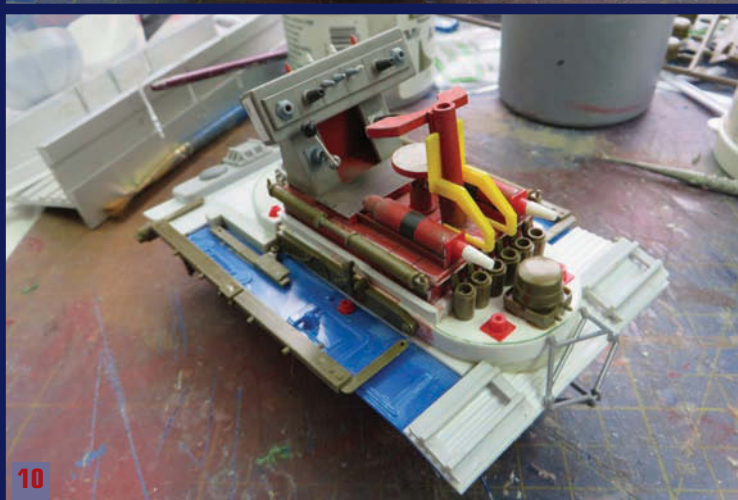
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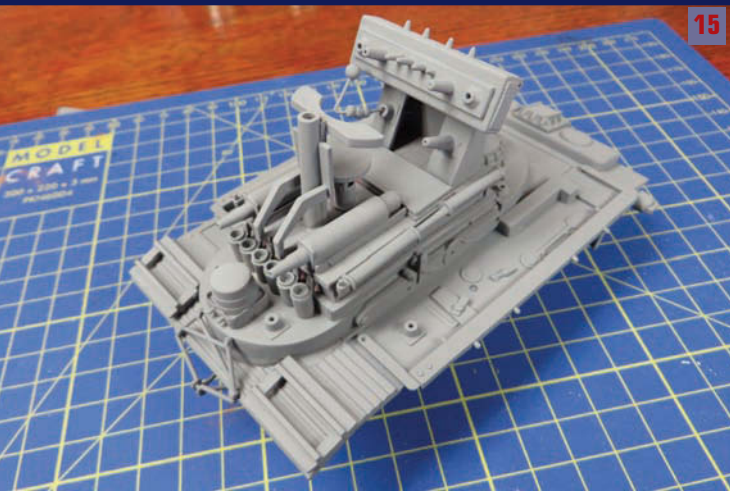
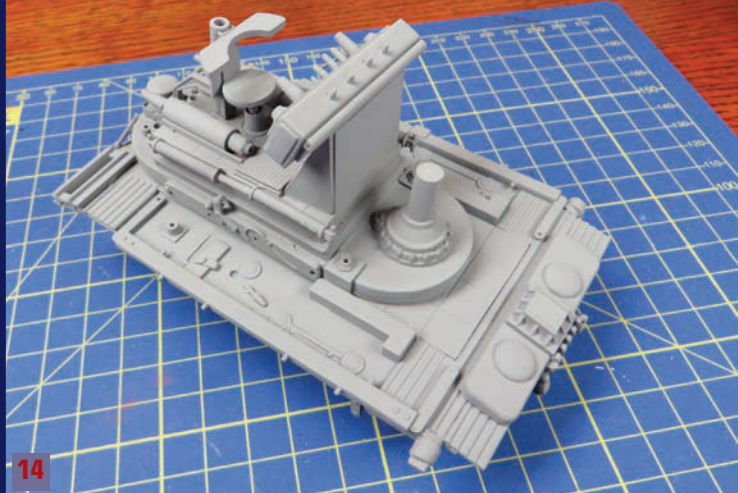
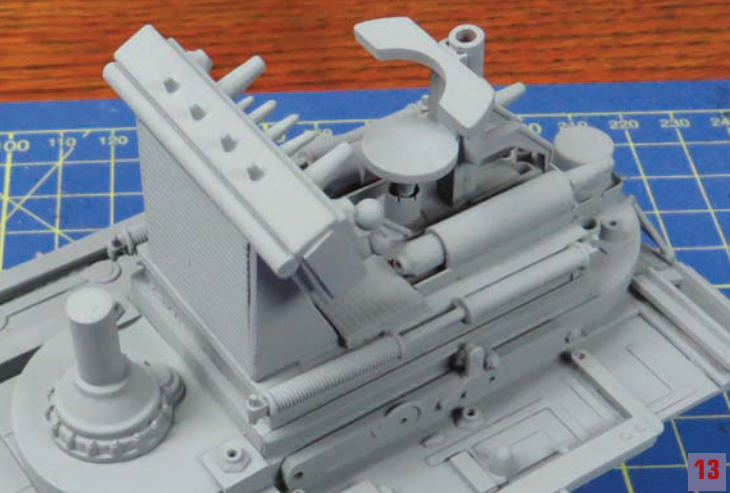
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12



A good few years ago I built the superb *Elevator Car* and *Recovery Vehicle* kits produced by UNCL and, at the time, decided to use *Liquitex Naphthol Light Red* for the body colour and was very pleased with it. As such, I chose to keep to the same colour for the *Neutraliser Vehicle*. *Liquitex* produce a range of artist's acrylic paints in two different consistencies and, generally, for model-making, I use their 'soft body' range. Being an artist's acrylic paint it has a slightly greater degree of translucency than some model acrylic paints and so you need to build up the colour over a number of coats, which were applied using my *Aztec* airbrush and thinned with *Vallejo Airbrush Thinner*. When thoroughly dry I carried out the detail painting using *Vallejo French Mirage Blue* and *Neutral Grey*. Once complete this was sealed with a coat of *Vallejo Gloss Varnish*, which acted as a base for decal application. The decals were non-specific and purely intended to provide some visual interest. Once dry they were overcoated with a further coat of gloss then matt varnished.

I started the weathering process by using washes and dry-brush technique. Once dry I set about

creating the effect of mud splashes and general dirtying down. I used *MIG Pigments Russian Earth*, *Dark Mud* and *Light Earth* and mixed each with some enamel thinners. I dipped a dedicated toothbrush in each mix in turn and ran the tip of my finger over the brush to create a random spray effect on the model. When dry I found this to be a little harsh and so blended the pigments on the model by using a scrubbing motion with an old stiff brush.

The tracks are made of individual pieces glued to a 'rubber band' after being painted and weathered and then fitted on the vehicle with the wheels. Further mud splashes were applied as above.

The emitter dish started life as an internal fuel tank dome in an *Airfix Saturn V* kit and further parts from the spares box and plastic tubing were used to complete the assembly before painting using the same colours as the main body and weathering with washes and drybrushing.

I decided to repaint the *Brains* figure as I would like to believe that my skills have improved over the years, and brush applied *Vallejo White Primer*

13 - 16: the tractor is primed.

17: red base coat and first wash applied.

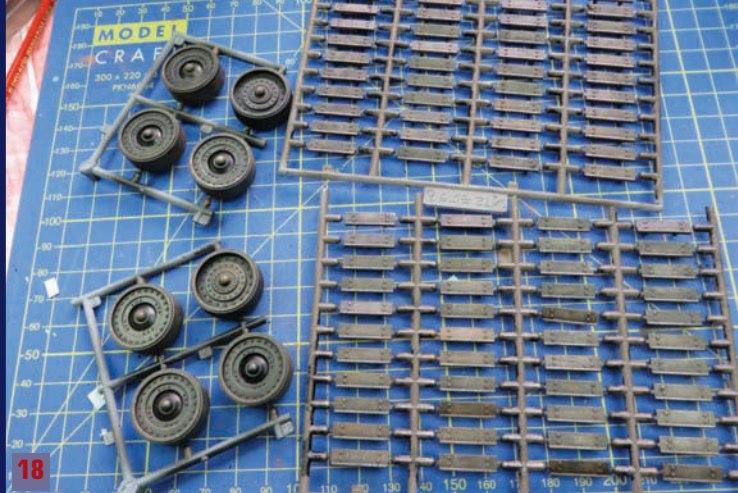
18: tracks painted and weathered.

19 - 21: mud splashes.

22 - 24: decalling applied.



17



18



19



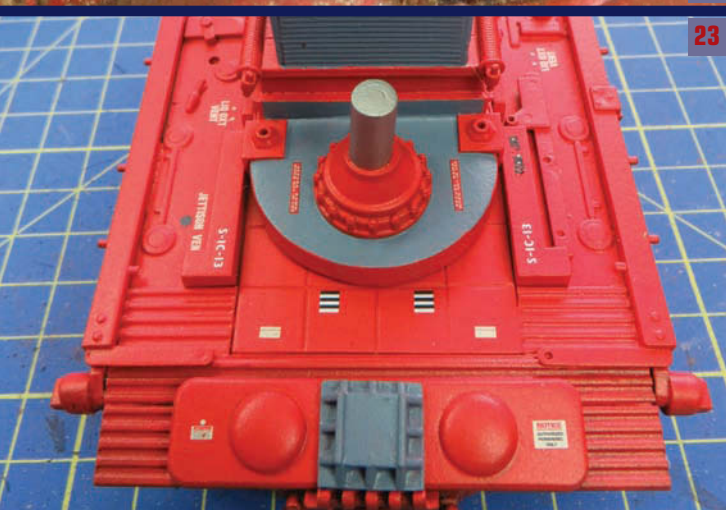
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- 25: decalling completed.
- 26: tracks and wheels.
- 27: foam base.
- 28: foam putty applied.
- 29 - 31: pigments applied.
- 32: foam putty sanded.
- 33: rocks added.
- 34 - 36: completed weathering.

to work over. This is a superb primer and, whilst very thin, provides excellent coverage with a couple of coats. With small scale figures I like to start by painting an opaque base colour to each area which is a mid-tone. I then work from dark to light as I would do on a larger scale figure, but not wanting to use an airbrush on something this small I mix in some drying retarder with the paint which slows down the drying time so that I can blend the paint on the model using a traditional brush. Once satisfied with the paintwork I applied a coat of varnish and glued *Brains* into position on the *Neutraliser Vehicle*.

One of my pet hates when looking at completed models is to see them isolated with no sense of place and/or scale, which is partly why I like to build dioramas. I started by making an approximate assessment of the size of base I would require. When making this decision you need to give the feature model enough space to breathe but not too much that there is plenty of vacant space around it. The model is only really seen in the episode traversing down an inclining road and coming to a halt by a rocky outcrop. Whilst not being pedantically exacting, I decided I would create a section of terrain that would evoke the feel of the episode.

I cut a baseboard to size using dense polystyrene foam and chamfered the edges with a hot knife. Contours were added using further sections of polystyrene similarly cut to size and shape and set in place using hot glue. To blend the contours together I applied *Woodland Scenics Foam Putty* with an old butter knife. This was allowed to dry then sanded to remove any rough edges or ridges.

I used plaster to cast some rock shapes from *Woodland Scenics* moulds (after spending an inordinate amount of time trying to find them after the big tidy up prior to decorating my house) and these were glued in place once again using hot glue. *Foam Putty* was used to blend the pieces into homogenous outcrops. I used *Artist's Gesso* to prime the base as aerosol spray cans have a tendency to melt any exposed polystyrene foam (although it does make an interesting noise as you wipe away the tears of despair from your eyes). The rocks were given base colours by applying liquid pigments wet on wet using a sponge applicator.

It is important that the rocks appear to be coming out of the ground rather than just sitting on it and so I mixed up some *Celluclay* (a fine papier mache) with water, colouring and PVA glue



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37 - 41: further examples of the completed weathering.
42: rocks primed.
43: rocks washed.
44: starting again with Brains.



45



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51

- 45: rocks and sand applied to base.
- 46: sand and gravel attached to base.
- 47: *Brains* complete, but he's 'armless.
- 48: my *Brains* are small enough to fit in my hand.
- 49 - 52: *Brains*.
- 53: pigment applied to base.



52



53

to minimise cracking. This was trowel-applied to the base and whilst still wet covered with a sheet of cling film so that the vehicle tracks could be impressed into the base. The cling film was removed and whilst still wet various grades of sand and gravel were also pressed into the *Celluclay*.

The *Celluclay* was set aside to dry for a few days before coating with a diluted coat of PVA glue to keep everything in place. Once that was dry I drybrushed the rocks and applied Earth-coloured pigment powders, once again using enamel thinner as a medium, to give the ground cover a more homogenous appearance. When dry some blending was carried out using a scrubbing technique with an old stiff brush and then sealed with a coat of varnish. All that was left to do was place the *Neutraliser Vehicle* on the base and glue it to a wooden chopping board for display purposes.







BAT STUFF!

From his secret lair — and working secretly — Andy Pearson secretly constructs secret test shots of Round 2's Bat Missile and Batwing

SOME PEOPLE WOULD VIEW WITH JUSTIFIED CYNICISM THE POSSIBILITY OF A CHAP OF SOME SIXTY-SEVEN SUMMERS still enjoying the Christmas morning feeling when opening a package but I find that same frisson of excitement when receiving a clear plastic bag across which is written 'First test shot'.

In this case, I had two such delights to contemplate in the shape of the *Round 2* re-releases of both the *AMT Bat Missile* and the *Batwing* from the Tim Burton Movies starring Michael Keaton.





This page: *Batmissile* parts. Chassis, wheels and suspension. Contrast between raw plastic and airbrushed area. *Tamiya Smoke* tint to windscreen. Dashboard primed. Painted instruments. Steering wheel and controls. Seats detailed.

Where to begin?

I confess that I do have a favourite and that's the *Batwing* and so, as with the traditional Pearson approach to any meal involving sausages, I chose to save the best (the sausage, if you will) for last and began with the missile. This a strange and somewhat barmy design as those of us who've seen its movie manifestation might attest.

The kit is 1:25 scale and moulded in black injected moulded plastic with three clear components and eight vinyl tyres giving a total of

fifty-one parts in all. As is usually the case with hot from the mould kits, there was a distinct absence of instructions but what went where was reasonably self-evident after a brief examination of the kit – with a significant exception.

Fearful symmetry

When the movie *Batmobile* transforms into the *Bat Missile* in order to negotiate a narrow back alley and escape the forces of law and order, it sheds the outer sections and the wheel



configuration changes and an additional four wheels appear, these presumably hidden within the body in anticipation of such an occasion.

The shape of the cockpit and windscreen also change (via some sort of bendy Bat-material, I imagine) and the fact that the abandoned body panels contain two machine guns and ammunition is overlooked. All-in-all, I think utilisation of *Batman's* legendary knowledge of his city's streets might have been utilised to avoid all this fuss but that wouldn't have been such fun.

The secondary wheels are supported by external suspension and axle units and I needed to establish just where these went. As you might imagine there is no shortage of images of the *Bat Missile* on the Internet but there seemed to be some variation in the position of the secondary suspension. In many cases the suspension was on the rear wheels of the two pairs but in some it was on the front. This applied to box art and some diecast toys. I tracked down a screen shot from the movie where the *Missile* is viewed from the left where the

Silver undercoat to wheels. Silver paint to suspension unit. Black weathering to wheel. Suspension ink weathered. Hand control added. Finished suspension unit. Seat in cockpit. Completed cockpit.



Finished wheel.
Detailing to body.
Close-up of body
detail. Turbine nose
needing some work.
Intake detail.
Cleaned-up nose with
paint. Wheels and
tyres—note hub depth
compared with front
tyres. Nose assembly.

suspension was clearly on the front.
Eventually I found my way to Jay Ohrberg's web
page [www.jayohrberg.com] and, as one would
expect from a contribution by the man who actually
designed the vehicle, all became clear. The
transformation of the wheels is achieved, in part, by
the road wheels pivoting in the centre of the axle so
that, on one side, the wheel moves forward whilst on
the other it moves back, whilst the secondary wheels
pop out from beneath the body. Looking at
Mr. Ohrberg's initial sketches and his commentary, it

would appear that his original concept was for the
Missile to run on just four wheels in-line, rather like
a motor cycle, which would make the transformation
by pivoting more logical. As a final aside I'd assumed,
my memory of the movie being somewhat vague,
that all this was done with model work but it appears
that the *Bat Missile* was also built as a full-sized
practical prop. And, on the subject of models...

Any colour you like, as long as it's black

It's my habit to prime any model I'm working on, be

it plastic, resin or metal, before painting but in this case I thought it would be interesting to see how I got on simply airbrushing the body colour (semi-gloss black for the most part) directly onto the black plastic as I had the germ of an idea for some simple weathering and damage effects. That done and the paint given 24 hours to dry I picked out some details in the section above the back wheels in thinned gunmetal acrylic, painted the suspension units in *Games Workshop Boltgun Metal* and a metallic blue then detailed the dashboard, controls, steering wheel and seat. For the seat I simulated a

leather effect by painting the basic matt black with *Johnson's Pledge*. The windscreen was airbrushed with *Tamiya XO-19 Smoke*.

All together now

Now I may be wrong here but I seem to recall that the original kit was a *Snap Fast* job and it may be that this new version will be released in the same format or that it may be a more traditional construction. Certainly some parts did snap into place whilst some benefitted from a touch of adhesive but, notwithstanding that consideration,

Jet nozzle detail.
Differences between
inner hubs.
Assembled model.





I pressed ahead with the build in my usual ‘bull in a china shop’ fashion. Having glued the upper body to the chassis I realised that I had forgotten to include two small, clear porthole transparencies and so gently prised the section apart, inserted the missing windows and glued the thing back together.

Holding the two sections together with rubber bands, I realised that the front end could do with a little more adhesive so ran some *E.M.A. Plastic Weld* liquid into the inner seams. This is great stuff in the right circumstances: these were not the right circumstances.

Hand me the filler...and the service revolver

The thin formulation of *Plastic Weld* lets it flow along seams by capillary action but it will also readily flow along the underside of rubber bands as I found when I removed one of these and found a couple of shallow trenches that the adhesive had melted. This is the sort of basic error that experience should have taught me to avoid but, in the event, it was a minor problem easily overcome with the black formulation of *Milliput*, some fine abrasive paper and a re-spray.

Eight wheels on my wagon...

When I’d built the re-released *Batmobile* for a review (see Volume 39) I’d airbrushed some chromed wheels with a thinned mix of the body colour and wiped away that paint to reveal the logos at the wheels’ centres. The *Missile* didn’t feature chromed wheels but, to replicate the previous approach on the main wheels, I used *NC-ACRYLIC Chrome* by *Montana-Cans* [montana-cans.com] and airbrushed the same thinned black on top of this, which was reasonably successful.

For the secondary wheels, I used the *Games Workshop Boltgun Metal* with lots of pigment powder weathering. One point is worth making about the wheels, although I should stress that I was building a test shot kit. All eight wheels

supplied were of the same size in terms of both width and diameter although the rear tyres (which they fitted perfectly) are significantly wider than those at the front. This meant that, in the latter case, the wheels protruded from the tyres. This makes no cosmetic difference to the finished model whatsoever but I found it worthwhile to fix these tyres in place with a bead of *PVA* to keep them in the correct position.

Weather or not

I suggested earlier that I had an idea for weathering and had intended to give the *Missile* a very ‘lived-in’ appearance. My reasoning was that there would be a distinct demarcation between the areas of the *Missile* that were concealed within the main body of the *Batmobile* and those that were not, due to extra wear and tear on the latter. After some tentative experimentation I decided to abandon this idea as it was just going to look odd and, anyway, it was probably better to just present a straight representation of what the kit buyer was going to find in the box.

FLY ME TO THE MOON

ICONIC IS A WORD SOMETIMES OVERUSED WITH REGARD TO FILM SCENES but I would suggest that the image of the *Batwing* silhouetted against a full moon qualifies for that description, showing the noble aircraft in all its glory shortly before it was shot down by Jack Nicholson and his trick gun.

I understand that the concept of the *Batwing* replicating *Batman*’s emblem was from the mind of Tim Burton but the model used in the movie was created by the late, great Derek Meddings.

This was the one I was really looking forward to as I hadn’t built the model before and, again, there was the joy of being an early adopter as far as the re-release was concerned, if that’s not an oxymoron.

Almost all present and correct

The parts on their runners were carefully removed from their bag and laid out for the compulsory (although not always used) 'bits from the box' shot and it was immediately obvious that something had gone AWOL. This, specifically, was part 10, an undercarriage wheel-bay door. As the kit had passed through the Editor-in-Chief's hands I asked if he'd opened the bags, giving the part the chance to escape: he had not.

The options were to ask the folks at *Round 2* back home in Indiana for a spare or to try and

make one and the second option sounded like it would be more fun. Having established that 1/16 inch thick plastic card would be about the right gauge I used lengths of automotive masking tape to trace the basic shapes required. The larger of these had a very definite curve to it and it would probably have been easiest to coax the plastic into this shape using a heat source such as a hair dryer. As I don't have much hair I don't own one of these and, as the only woman I know well enough to ask for a loan declared radio silence some months ago, there would be difficulties. Of course hot water

Batwing bits from the bag.

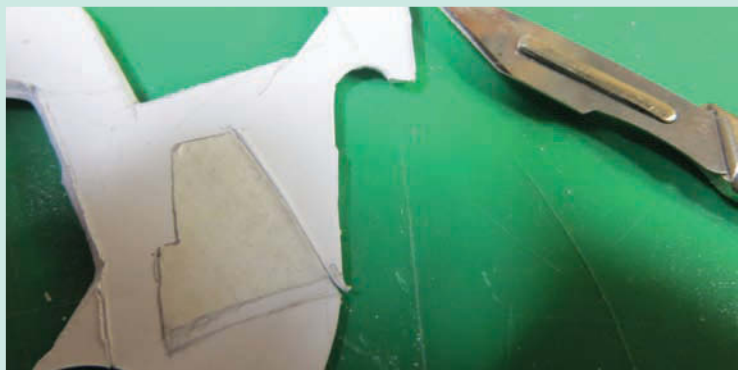
The twin of this part will have to be scratchbuilt.

Beginning the duplication process.

First plastic card component ready

Coaxing a curve.

Second component cut from plastic card.



Second plastic card component added to the first. Finished duplicate part. Mould plugs need to be removed from tailfin.

Restored fin. Test fit of upper and lower hulls. *Batman* components - a nicely detailed figure.

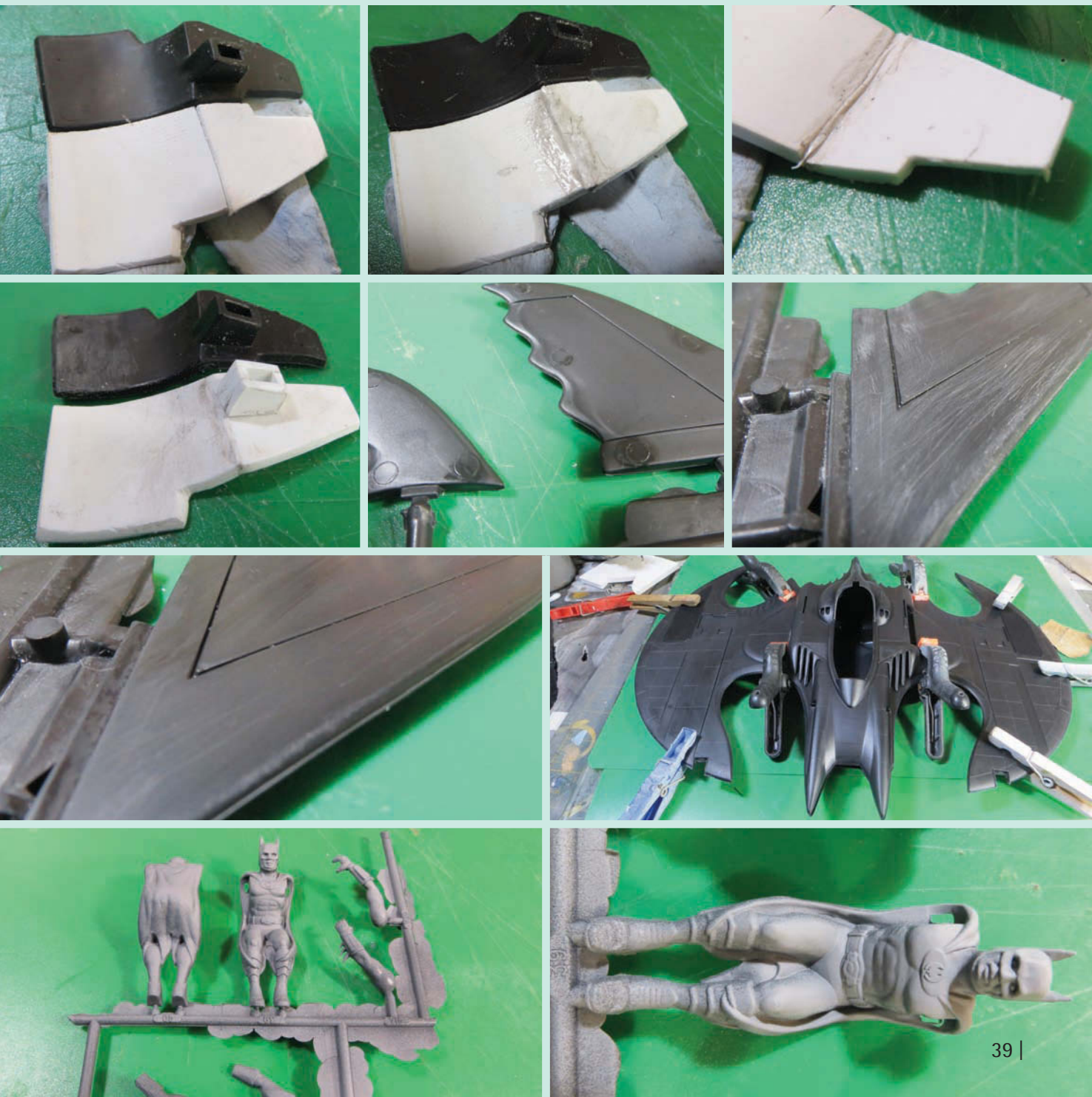
was an option but plastic is, by its very nature, plastic, so I took the cut shape and bent it carefully by hand and then placed it in a small vice (I have a couple of these but the other one's best not discussed in a family publication) and bent it somewhat further. Leaving this overnight I was pleased to discover that it seemed happy to retain its new shape. The second element of the missing door was more or less flat and this was cut and attached to its curved chum using *Plastic Weld* with slivers of plastic card melted into the join for added strength and to create (following some file

work) a smooth transition, one to the other.

The only other part needed was a small rectangular box where the door would join the undercarriage leg and this was made using the same technique.

The naming of parts

In the absence of an instruction sheet a study of images of the *Batwing* ensued, followed by a careful examination of the parts supplied to ensure that I knew what went where. As with the *Bat Missile* kit, very little clean-up was required, although there





were some mould plug gates on the fins that required attention using wet and dry abrasive paper.

Having successfully skipped the primer stage with the *Bat Missile* and with storm front Abigail blowing in, precluding any work with a rattle can outdoors, I was going for the same paint onto plastic approach but after a minor clean-up of some parts the storm veered north, the weather improved and so it was back to the rattle can primer and car paint route, choosing *Halfords Volvo Dark Grey* for the finish.

The chameleon effect

Having applied the first coat of the paint I was reminded of one of the qualities that grey often manifests as a shade. As it has been some decades since my art school days (a vain attempt to emulate my talented maternal grandfather) it was timely that I had just watched a video linked via Jason Gares' blog on the *SF&FM* website. This covered painting techniques and tips for the *Millennium Falcon* and is by one Steve Dymso, who is both well informed and very funny.

Cockpit detail.

Positioning *Batman's* arms... ..then adding filler. Weathering test. Cockpit with spirit marker framing. Night vision unit... ..with *Kristal Klear* lenses. These will dry clear. *Bats* takes the controls.



Batwing cockpit completed. Wing lights and, for a time, mysterious lenses. Gluing and clamping the main components. Mini-gun mounted on hatch. Nose wheel. Mystery lenses in position. Weathering under wings.

Mr. Dymszo mentions the above quality that greys possess, inasmuch as they will take on some of the shade or colour adjacent to them. In the case of the car paint I was using, I found that I was getting more than a hint of brown in the finish which was a concern until I realised that I was viewing it from outside my house and the paint was picking up the colour of the surrounding brickwork both by optical osmosis and reflection.

Put it together and what have you got?

Assembling the model was quite straightforward and is best illustrated by the images accompanying these words but there was the matter of working out what went where and, as importantly, in what order. The cockpit and *Batman* figure were an obvious next step whilst the paint was drying thoroughly on the fuselage and wing halves. The cockpit interior was given a misting of flat black whilst the seat was painted in the same acrylic but with the upholstered areas brush-painted in semi-gloss black.



The *Batman* figure came in six parts and his arms, which need to be positioned holding the control column (I believe that the technical term is yoke) so lumps of *Blu Tack* held the controls in place while I glued the arms. With these in position some modest filling was needed and he was ready for painting in the semi-gloss black with a matt black cape and yellow and titanium gold for logo and utility belt respectively. It's worth noting that the figure is a rather good rendering of the Michael Keaton *Batman* and a little care in clean-up of seams and painting will pay dividends.

There was quite a bit of moulded detail within the cockpit, particularly on the side panels, although on the front control panel this was less pronounced. I imagine decals will be provided with the release version of the kit but I went for brush painting. Included with the cockpit components was a night-vision/aiming device and I was unsure where this fitted until I had a look at the finished (original) kit on the *Fantastic Plastic* website [fantastic-plastic.com]. The sight itself had two holes that line up with *Batman*'s eyes and these were filled with *Microscale Micro Kristal Klear* painted in clear red when dry.

In terms of the overall assembly, once the cockpit was installed, the correct steps seemed to be to fit the lower wing halves to the lower body, then fit the upper wing halves and then fit the upper body. I should add here that the fit was excellent. Before doing this I test-fitted the undercarriage legs and painted these and fitted the wheels, finished in tyre black and aluminium.

The kit is provided with the balloon-sniping jaws used in the movie and these appeared to be a retractable working part although I chose not to use them as the access doors looked better closed.

At this stage I had just two parts that I couldn't identify. These were on the clear plastic runners and were clearly (sorry about the pun) intended to be lenses, although where they went was a mystery.

Picking out the panels

Whilst I had ready access to the unassembled lower wings, it seemed a good time to look at weathering and bringing out some of the details and this called for some subtlety – not always my strong suit. During my early internet researches I had come across several examples of the finished kit and, indeed, there's an image of a splendid build-up of this very kit by Jim Small on page 6, volume 39 of this very publication. The challenge was to try and emulate some of these.

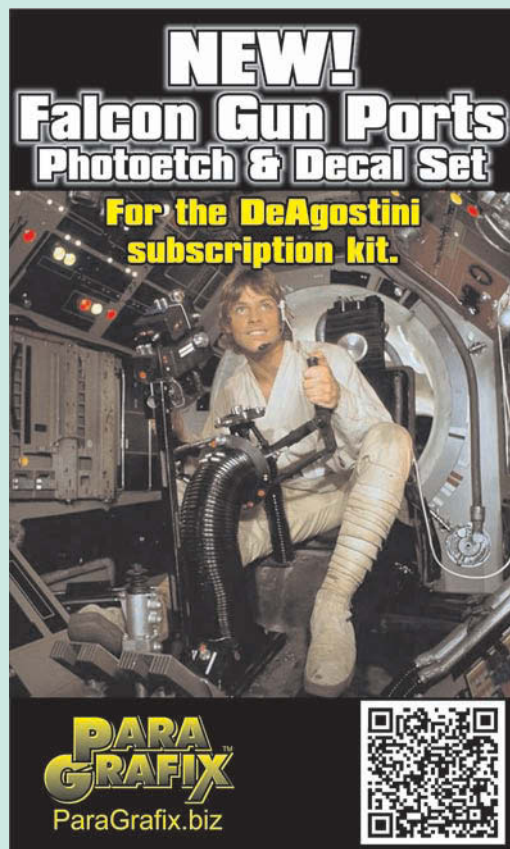
My first experiments were with grey and blue

pastels of various hues and these were fine until I hit them with a purity seal, at which point they disappeared. The second, and perhaps most obvious, option was to airbrush but I was not sure that I had the delicacy of touch for this.

The answer was to go to the pub and have a think. Having thought, I found a 4B pencil and rubbed this on some 500 grit abrasive paper to create fine graphite powder which I applied to selected panels with a square-ended sable brush. This worked rather well but there was the same problem when the purity seal was applied. It then occurred to me that this didn't really matter as I was likely to be the only person handling the model and, if anybody else poked around with it, I would be in a prime position to trace the miscreant through their fingerprints. In other words I could miss out the sealer stage if I took care with the finished model.

Interesting symmetry

Once the main assembly, in the sequence described above, was completed I turned my attention to the upper wing panels and made an interesting discovery. Whilst the lower wing panels were symmetrical, those on the upper wing were not. I assume that this reflects the situation with the actual movie prop and, similarly, assume that it





reflects a design decision by Mr. Meddings. Perhaps his thought process was that sections of the *Batwing* would be sourced from different manufacturers and assembled in the dark recesses of *Wayne Manor* in order to conceal their destiny. On the other hand it could have been because the overall effect looks rather cool, as I believe you young people say.

The final stages of the assembly now took place with no real mishaps. The edges of the cockpit canopies and the framings were outlined using a *Sharpie* spirit marker (the main cockpit canopy needed to be sandwiched between the back of the inner cockpit and the upper fuselage half so that the cockpit can open) and this approach was also taken with the clear wing light inserts. On the subject of clear inserts, the mystery of the two small lenses had been solved when weathering the underside of the model, as these were obviously landing lights situated forward of the main wheel wells.

Bang: you're dead!

The *Batwing* is liberally supplied with weaponry: two wing-mounted machine guns, rockets, forward-mounted lasers (I assume they're lasers,

which is why I'm typing this one-handed whilst the other hand does that little finger to mouth gesture favoured by *Dr. Evil*) and a Gatling-type mini-gun in a neat fold away panel that actually works: the panel, not the gun. What fun!

Last of all there's a dome base with *Bat* logo and stand which I assembled and painted but didn't use. A couple (literally) of other points were two panels in the upper wing which are either dive brakes or control surfaces and I fitted these in a slightly raised position as they might have been used during take-off or landing as the model had been built with the undercarriage down.

One final observation, or rather question, is how would the thing fly? Clearly there are no propellers but neither are there intakes or exhausts for jet engines. Still, it's only make believe and the design itself is superb and, well, cool as a very cool thing.

*Review test shots kindly supplied by
Round 2
www.round2models.com*

THIS PUBLICATION IS THE GIFT THAT JUST KEEPS GIVING AND I SAY THAT NOT ONLY AS A READER (BE IT EVER A BIASED ONE) but also as one of the regular modellers. A little time ago the Editor-in-Chief asked me if I would like to produce a review of the latest iteration of the *Batmobile* from *Moebius*. To say that I jumped at the chance would be to underestimate my reaction.

Armed with an anonymous box of components and with several jpegs winging their way through the ether, I headed for home and cleared the decks in anticipation. As with many test-shot review kits there were no instructions in the traditional sense as this was some months before the kit (and, indeed, the movie) was to be released, so much of what I had was a work in progress. The aforementioned jpegs provided exploded diagrams of the vehicle up to completion of the rolling chassis, an image of the finished *Batmobile* and there was a written step-by-step instruction sheet

but I should stress that these were not the final words on the subject so any comments I make regarding said instructions should be viewed in that light.

Rather than work from the jpegs on-screen it seemed logical to have print-outs produced and so it was off to the local print and copy shop for A2 paper versions of all but the overall master drawing which was locked, perhaps understandably, with some sort of security protocol.

It's perhaps stating the obvious but we don't all share the same interests and, having printed out the first drawing, the young lady serving me asked what the subject was. I, of course, went into 'Can you keep a secret?' mode in order to build up the excitement. I then explained that it was an as yet unreleased model from a forthcoming superhero blockbuster movie so was, to some extent, still under wraps. 'Oh!' she replied, obviously

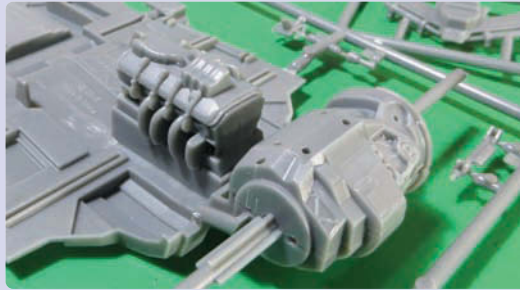
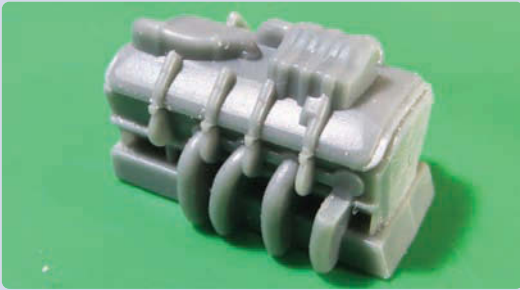


LOW SLUNG SWEET CHARIOT

Andy Pearson builds the Dawn of Justice Batmobile by Moebius



Top to bottom:
Bar bits from the box.
 Engine components.
 Assembled engine block.
 Engine and transaxle in position test.
 Engine with paint.
 Engine and transaxle with paint and weathering.
 Front axle and suspension.
 Side panel test fit interior view.
 Side panels test fit.
 Suspension units.
 Engine bulkheads.
 Suspension and axle detail.



Top to bottom:
 Interior detail
 showing side panel
 components.
 Suspension detail.
 Fender and disc brake
 detail.
 Internal weathering
 to fenders.
 Seam removal and
 weathering to
 foreground tyre.
 Wheel and tyre
 components.



underwhelmed. 'I'm not really into that sort of stuff,' and wandered off to print out the rest of the material.

Back at base I gave all the parts a clean with methylated spirit then applied a coat of grey automotive primer and, whilst that was drying, began an internet search for as many alternative images of the new *Batmobile* as I could find. My primary concern at this point was to try and establish the finish I needed to achieve and, initially, there was some confusion.

First of all I came across a brief clip showing a walk-round of the car set in a suitably moody, mist-shrouded alley. This provided some superb detail but indicated that this *Batmobile* had a quite bright aluminium finish which didn't seem very *Dark Knight*-ish. I then found a clip of a chap who might have been a younger *Lucius Fox* or perhaps his son sitting in the same (or very similar) shiny vehicle. Perhaps that was another 'Does it come in black?' moment in the new movie. At about the same time another image was discovered which professed to be the first official image of the *Batmobile* and that looked rather more the part, being a dark grey and looking somewhat lived-in.

I've rarely been a 'build, mask and paint' merchant so my plan was to put a base colour on as much of the model as possible before any building took place. This began with an application of aluminium automotive paint from a rattle can to the chassis, engine, transaxle and various other components which, as explained below, caused some minor problems. I then mixed a basic body colour using *Tamiya Flat Black* and blue-black to produce a very dark grey, a shade somewhat darker than that in which the model would be finally finished but there was some method in this approach.

I'd learned many years ago that dark, flat shades tend to reflect subsequent handling in their finish so using such a shade, without a purity seal of some sort, would give me some free weathering. The downside of having used the aluminium under some of these parts meant that hints of that metallic paint migrated to the dark grey surfaces. I suppose this must have been the nature of the paint and wasn't too much of a problem as I would be addressing the overall finish of the model once assembled.

The first assembly stages were to put the engine and transaxle together and fix these in place on the chassis along with the exhaust, itself a two-part assembly. It seemed logical to add weathering to these parts whilst they were fully accessible and this was done with very thin washes of dark iron

acrylic, black inks and some black and dark brown pigment powders.

As you may imagine, not having a detailed visual guide as to what went where meant rather more dry assembly that will probably be necessary with the commercially available kit but this approach did pay dividends as, in my experience, it invariably does.

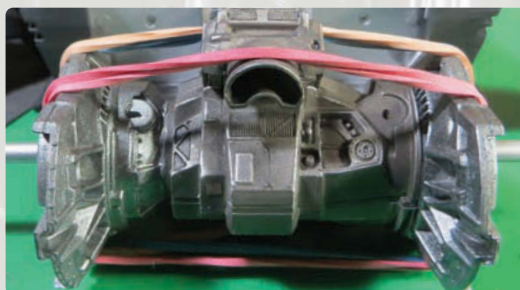
Next came the assembly of the front suspension which was to be put together and test-fitted to the lower chassis but not glued in place. The two engine bulkheads were next and the correct fixing of these parts, which would be concealed on the finished model, was most important, as they provide support to part of the *Batmobile's* body.

The left and right body panels (three of each) were next on the fixing list and these were subjected to a good deal of test-fitting as, whilst they nested with each other beautifully, discovering the correct way of coaxing them into position required some practice. The front suspension brace was then fitted (but not glued) into holes in the relevant body panels and then, in turn, glued to the upper front suspension.

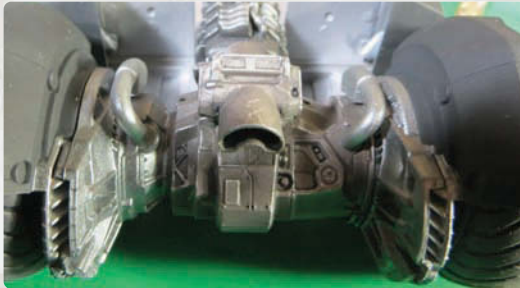
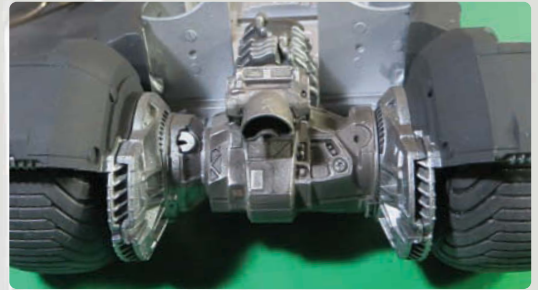
The assembly of the wheels and tyres came next and these had their own particular areas of interest. The wheel hubs, both front and rear, were very detailed and very recessed from the rims so a combination of airbrush and conventional sable brush was used here. The first coat of paint was gunmetal, followed by a dry-brush application of metallic grey and the lightest touch of titanium silver. When this was dry, dark grey pigment powders were used to bring out the detail and add weathering.

Soft vinyl tyres were supplied – and great lumps of things these were – but with really good and deep tread patterns. They had, of course, been born in a mould so that meant some very subtle seams needed to be removed from the tread areas and that entailed killing two birds with one stone. Even when newly fitted in real life, tyres tend to lose their pristine finish in no time at all, so these needed some wear and tear added and that was done using very fine abrasive papers, removing the aforementioned seams at the same time, followed by an application of dust and dirt from some of the more neglected corners of my work bench.

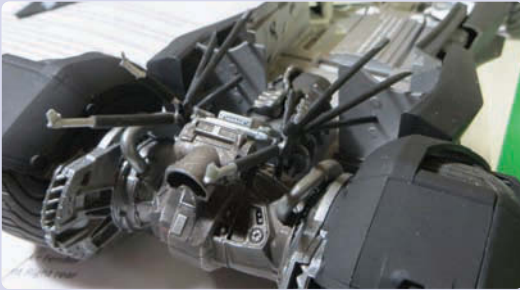
Having mentioned the nature of real car tyres I do have a neighbour who spends an inordinate amount of time cleaning his car and still applies a restorative finish to his tyres. He also removes the wheels to re-touch and polish the red disc callipers which seems to be above and beyond the call of duty to me but each to his own.



Contrast between weathered and un-weathered wheels. Drives pre-weathering. Running light detail. Fender and wheel assembly. Clear headlights masked for paint. Machine guns and mounts.



- Lower front wing and armament.
- Rear view of chassis.
- Further transaxle detail.
- Overview of rolling chassis.
- Dashboard decals and detail.
- Windshield detail.
- Finished seats.
- Front wings and actuators.
- Lower intakes in position.
- Temporary fit whilst gluing.
- Initial test fit of rear wing supports.
- View of cockpit.



On the subject of disc brakes, these were the next items to be addressed along with the assembly of the front fenders. The discs were airbrushed in silver then weathered and the callipers, in deference to my neighbour, brush painted in gloss red.

The front wheels and fenders were glued in place on the front axle and a similar procedure covered the rear axle, with the addition here of two drive housings which needed painting and weathering to match the exposed transaxle.

The first stages in the upper body assembly were the building of the machine guns (No more Mr. Nice-guy!) and the five-part front wing, both of which would be fitted to the upper body panel. Here the production drawing provided a hint of things (potentially) to come. The machine guns sit on a circular mount and the drawings show a secondary and, in this case, mysterious redundant part. In addition to running lights (painted clear orange on top of titanium lens colour) on the front fenders, there were two small headlights. These were completely clear components so the lens area was masked and each airbrushed overall in titanium silver, followed by the dark grey body colour.

The cockpit, with seats, controls and dashboard was next. The cockpit interior was airbrushed in a lighter grey than the main bodywork and the seats airbrushed in flat black but with the areas I deemed would be leather brush painted with *Pledge* floor polish to give them something of a gloss finish. There was a fair amount of moulded detail on the dashboard and it's quite possible that the final kit will be supplied with complementary decals for this. In this case I hit the spares file and found a decal that fitted a circular panel perfectly along with a couple of solid colour strips that could be cut to fit one screen and partially fill a blank area that looked as though it could use some company – and to **** with accuracy.

I also found some tiny dial decals which were added, all of the above going on top of an airbrushed coat of gloss acrylic in order to avoid silvering. Once dry, all was given a top coat of *Games Workshop Satin Purity Seal*.

With the interior completed, the hood panel upper and lower parts were glued together and had their individual activators (painted metallic grey and silver) added. I haven't a clue what either of those parts actually does unless they are additional spoilers to help keep the *Batmobile* on the ground at high speed or perhaps they are just there because they look good: I suspect the latter.

The reference images I'd found showed the

Top to bottom:
Support assembly.
Test fit of wing supports.
Upper intake body section.
Lower left wing glued in place.
First stage colour treatment.
Inner side panel detailing.

Opposite:
Initial weathering and colour test.



windshield to have a very dark tint so this was built up using *Tamiya X-19 Smoke* on the inside which produces a really good tinted glass effect but takes forever (figuratively speaking) to dry, as evidenced by a rather nice fingerprint supplied by yours truly which required some attention.

The end now seemed to be in sight as far as construction was concerned but the most complex procedures were to follow. One of the many distinctive features of the machine are two rear wings which sit upon a complex of bars and braces. These were relatively easy to construct but

needed time and care and a lot of test-fitting to the chassis assembly as the work proceeded. I'll mention one specific here, if only so that the reader can avoid a mistake that I made: regular readers will be aware that such an error is almost a tradition with my builds.

Part #9 is a centre bar which connects the left and right centre wing support braces and it's important to ensure that this is fitted in the upright position. In my eagerness to ensure that it lined up with the braces and that these fitted the holes in the chassis I allowed it to pivot slightly from the vertical. Now this wasn't the end of the world but I didn't notice my error until the next stage in the build and having it correctly positioned would have made life a lot easier and, more importantly, would have made the model that little bit more accurate. Having said that, the uninitiated would be hard pressed to notice the anomaly.

It was during the next steps in the build that I deliberately strayed from the prescribed order of things. As I suggested, there was quite a complex of supports for the rear wings and, when fitting these to the chassis, the instructions suggest using the lower wing halves to ensure that they are correctly positioned. This is, in my opinion, vital. With most of these supports in position and with

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my error with part #9 corrected by the application of gap-filling superglue, the instructions suggest cementing the upper body to the lower body and *then* gluing the wing support assemblies to the transaxle and the engine bulkheads. Frankly I couldn't make this work but did, eventually, manage to accomplish the step by bringing the supports and the body together by sort of a simultaneous and very stealthy manoeuvre. Imagine the incremental crawl of an adolescent's hand along the back of his first date's cinema seat and you'll perhaps appreciate the subtlety. Not to over-extend the metaphor, there were several attempts and rejections before satisfactory contact was made.

The instructions next tell the modeller to glue the upper and lower wing halves together and here

I would beg to differ. In addition to the various wing supports that fit into the lower wing halves, there are left and right coils and wing braces to be added beneath the wings. I found that by again using the lower wing as a positioning guide and using some blobs of *Blu Tack* as temporary adhesives I could get everything lined-up and then glue the supports into the lower wing. When this assembly was completely set in position, adding the upper wing halves was very easy as the fit was perfect. Doing the same thing 'blind' with the upper wing half in position would, I think, be rather more difficult.

The final stages were the addition of the left and right hood actuators and the canopy which I push-fitted rather than gluing so that the interior could be displayed if required.

Review test shot kindly
supplied by
Moebius Models.
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And so to the final painting and weathering. Using my airbrush and the original dark grey paint mix, I touched up the areas where stray traces of the aluminium (see paragraph 7) occurred and, once these were dry, began to look at subtle colour changes, weathering and indications of wear.

At various times during the build I had continued my search for images of the new *Batmobile* online and my most recent find had been the delivery of the beast itself to, I think, a studio tour venue. If you will forgive the use of a local dialect phrase: 'It ain't 'alf mucky!' It was also a rather lighter grey that I'd painted the bodywork but I had made allowances for that.

I use artist's pastels for subtle (or as subtle as I get) skin tones on sculpted figures and intended to use the same approach here. To that end I'd bought a quite broad, flat and very soft brush and now used that to apply lighter grey pastel powders to the dark grey body, building the shade up until it looked a much better match. To state the obvious, this needed to be done in daylight but the technique also added some weathering effects and highlighted some of the panels and lines. I also applied some graphite dust from a 4B pencil to some of the corners and the visible mechanical areas on the side panels and outer rear fenders, hopefully keeping things on the right side of filthy but only just.

With the model nearing completion I took a photograph on my phone to show to a friend who had expressed an interest and ran into him at a small gathering of friends and neighbours. Truth

to tell, none of these folk had any particular interest in models but all declared that the new *Batmobile* was very impressive indeed. Those comments related to the design, by the way, not my modelling skills and the opinion of the professionals is yet to be sought.



IN THE OPENING EPISODES OF **BLAKE'S 7**, FRAMED POLITICAL DISSIDENT *ROJ BLAKE*, sentenced to be deported to the prison planet *Cygnus Alpha*, sets out on his enforced journey aboard the prison ship *London*, where he first meets thief *Vila Restal*, smuggler *Jenna Stannis*, murderer *Olag Gan* and computer engineer *Kerr Avon*. All manner of interstellar low-budget hi jinks subsequently ensue, resulting in *Blake* and his new 'crew' taking control of an alien ship they dub the *Liberator* and pursuing the *London* to *Cygnus Alpha*...

Created by *Space Models* of Feltham, Middlesex, UK, who had also built the sublime *Eagle* miniatures for *Space:1999*, the *London* studio miniature was based on a sketch and cardboard mock-up produced by the show's Art Director Ian Scoones, and was built by model maker Simon Atkinson who developed working drawings from the sketch and rough model before

assembling the *London* from Perspex sheet detailed with styrene and plastic kit parts, including pieces from the famous *Airfix* girder bridge kit which had helped detail a great many **Thunderbirds** models.

'The design of the craft featured (in theory) removable container units and a travelling crane arrangement which would have lifted the units out,' states Simon at www.hermit.org/b7/Essays/London.html. 'There was a pylon at the front of the craft to support the pole from which the crane hung, this was fabricated from brass and soldered together. As far as I remember the idea was that the ship had been converted from a cargo craft into a prison ship by the *Federation*.

'The model had two holes drilled underneath for the inclusion of the pyrotechnic charges that

Opposite top to bottom:

The four stub wings and base.

Underside view with wings glued in place.

Rear underside - engines added.

Further underside detailing to rear wings.

Top panels are added - note gaps that require filling.

Gaps between base and rear super-structure also need addressing.

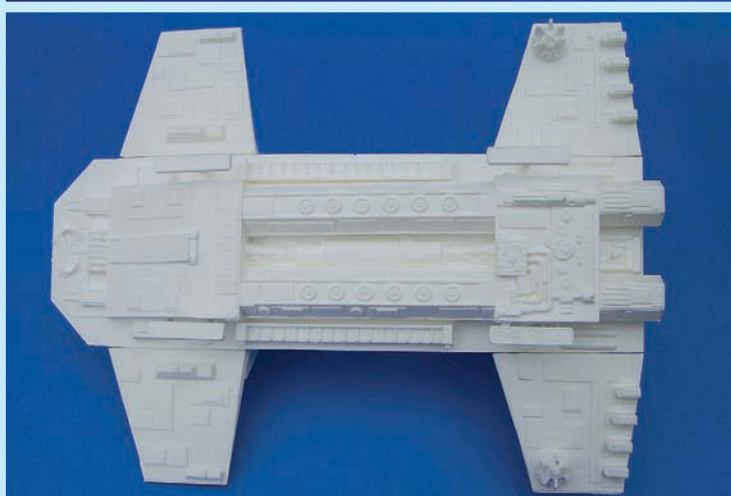
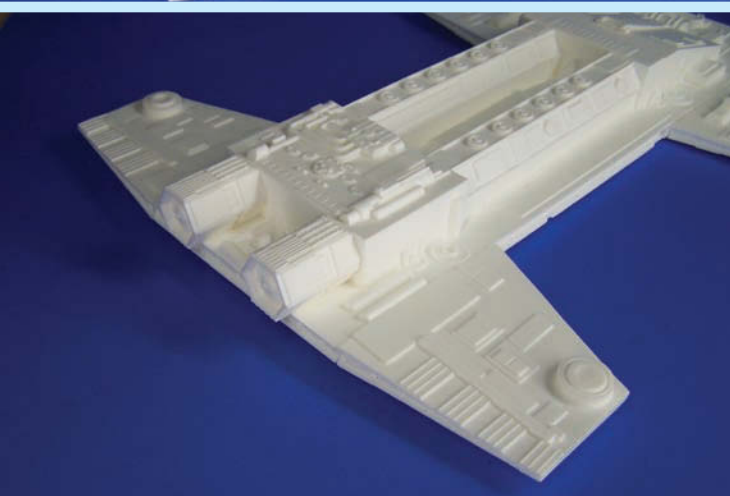
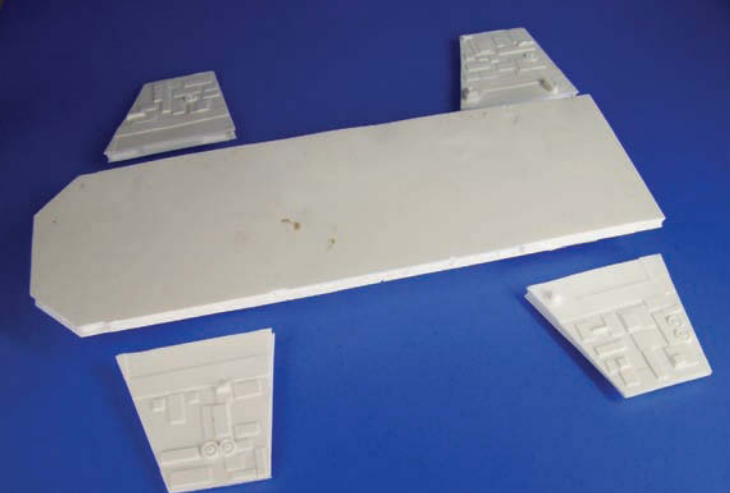
Top rear engines and crane gantries in place.

PRISON BLAKE

Building the *London* studio scale kit from Titan Find

Mike Reccia





would simulate the rockets used for launch (I remember we had lots of fun setting one of those off with a blow-torch!) Following completion the model was finished in matt white. I understand that following the delivery of the model to the client Martin (Bower – Ed.) did some extra detailing work and added undercarriage prior to filming. I was also asked to build a tiny version of the *London* for shots where it came across the huge *Liberator* for the first time.'

Studio scale London

Fondly remembered by a legion of fans, *Blake's 7* first aired in 1978, and I recall eagerly viewing footage of the *London* spaceship miniature during the first episode... and being completely underwhelmed. This 'flying brick' was a far cry from the *Star Wars* spaceship designs of the previous year's hit movie and the fabulous *Eagle* spacecraft seen in 1974 and '76 in two series of *Space: 1999*...

Over the years, however, I've rather warmed to the *London*. It has a no-nonsense, brutal, utilitarian look, with a chunky, heavily panelled hull – the ship has been designed to fulfil its purpose rather than win any beauty contests. I

therefore responded enthusiastically when a studio scale review kit of the *London* was offered to this title by *Titan Find*, who have made a number of *Blake's 7* ships available as kits in recent years.

This is the largest so far, weighing in at an impressive, studio-scaled 15.5 inches long by 13 inches wide by 8 inches tall once assembled. It's also the heaviest, cast in its entirety in resin, with the 'crane pole' proving the only exception, this part being supplied as a length of plastic tube that needs cutting to size. Almost all parts need some clean up of edges and/or removal from their thin resin backing, although most of this is a simple matter and there are no real challenges or frustrations involved in the process.

Assembly is pretty straightforward too, beginning with the lower level of the ship, to which the *London's* four stubby wings and two underside rear engines must be attached. It is recommended that, for strength, the wings be pinned to the base with lengths of brass rod (not supplied). Working to deadline, however, I sidestepped this fiddly procedure, using time-saving two-part epoxy instead, the engine parts being attached with superglue.

Below left:
additional detailing
to rear gantry,
Below right: girder
bridge parts to sides
of cargo containers
and circular detaing
to tops.
Bottom left:
Gaps above wing
filled prior to
priming.
Bottom right: work
begins to hide gaps
at rear with
additional panelling.



Next up are the landing gear legs, the two rear wing underside thrusters and the eight rectangular details that attach to the trailing edges of the rear wings. No problems here – each of the parts located well and was simply superglued in position. I initially had some concerns that the relatively flimsy-looking resin undercarriage legs and feet would not be capable of taking the weight of the body without buckling or twisting, but these worries happily proved to be without foundation, the four slim appendages to date supporting the *London*'s bulk admirably.

Hull breach... hull breach!

With the base completed the two hollow upper body housing parts could be attached. Again it is recommended that these be pinned to the base, and again I instead used two-part epoxy as a rapid alternative to the pinning process. With the upper housings in place sizeable gaps could be seen around the front of the ship between the base and upper housing, around the join between the two upper sections and between the rear base to upper housing joins – and I do mean *sizeable*... up to 2mm in some cases. I therefore mixed a generous amount of P38 car body filler and trowelled this into the lower front section crevices, sanding it

down once hard to blend in with the contours of the ship. In tackling the rear section gaps the amount of raised detailing made the effective use of filler awkward and so, as many of the panels are an approximation of what was featured on the original miniature rather than an exact panel by panel reproduction, I hid the gaps by gluing small rectangular sections of plasticard over them to represent further panelling.

A number of 'deck plate' patterned walkway strips need to be knifed out of their thin resin surrounding sheet and superglued on the top face of the base to but up against the upper housings. These not only added detail to the ship, but helped to hide the lesser gaps that existed between base and upper housings on the side sections of the *London*.

Getting the London look

I vaguely remember a 'functioning' airlock sequence from the show featuring a strange, 'snaky' tube worming out of the *London*'s body from the rear section. On the kit the airlock door 'ends' of these tubes are represented by two parts each, and these were quickly added to the rear section without incident or need for filler.

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Completing the assembly involved the positioning and gluing of the rear upper engines, the upper cockpit section, the 'water tower' (as it is described in the instructions and much reference to the *London* miniature – it is actually the travelling crane pylon) and the adding of the circular details that sit top centre across each of the cargo sections plus the girder bridge parts that are positioned centrally across the sides of each container unit. It should be noted that the raised circular positioning motifs on the tops of the cargo section are not in line on the kit, and that the circular details one adds to them therefore need to be adjusted accordingly so that they form a straight line when viewed from the top of the ship.

A final touch was to position the delicate rear crane gantry (this snapped into three pieces as I was filing away the resin between the girder sections and had to be superglued back together) then add the cut down length of plastic tubing so that it located in the depression on the rear face of the front pylon, rested top centre across the rear gantry, and connected to the rear engine block. Studying what shots of the original miniature I could find on the net there appeared to be a rectangular section that the crane pole threaded through and which sat top centre on the gantry, plus there were a couple of rectangular detail parts on the top face of the gantry to extreme left and right. These parts are not supplied with the kit and so were created from plastic spares box pieces suitably modified.

Let me take you through the streaks of London

With the *London* completely assembled I primed and pre-shaded the entire ship with a spray of *Humbrol* grey model primer. I then applied a top coat of *Ford Diamond White* (left over from my AMT 22-inch *Eagle* kit build) so that just enough of the underlying grey showed through to dull down the white and give depth to the panelling. At

this stage the two 'London' waterslide decals provided were oversprayed with *Citadel Purity Seal* (the instructions recommend they be given a further sealant coat) and applied to the large front panels to either side of the ship. Following a dusting of *Purity Seal* and working inside on a very dark February day I next set about weathering the ship with *MIG Pigment Streaking Effects Streaking Grime*, applying it where filth and muck would likely accumulate on a long unwashed, atmosphere-capable 'tub'.

As evening fell the weathering effect looked great. As morning dawned, it didn't. Darn this gloomy time of year! In the relatively clear light of the following day the *Streaking Grime* seemed to sit above the base colour rather than be an integral part of the overall weathering effect. It looked too brown for my liking too. I therefore oversprayed the entire model lightly with *Humbrol Matt White*, which knocked back the *Grime* and gave it a much more integrated, realistic appearance. Then, using a folded sheet of paper as a hard edge I streaked the ship with the *Matt Grey Primer* to suggest further scoring lines and panelling. At the end of this session I was far happier that the ship's revised paint job more closely resembled that of the original miniature.

The *London* sports what look like two 'window' areas – a black rectangle at the front of the ship and a second located on the 'engine tower' behind the rear gantry. My final move was to replicate these by spraying lengths of scrap adhesive label paper surround matt black, measuring the indents on the model, cutting out rectangles to appropriate size and applying them to the model within the depressions.

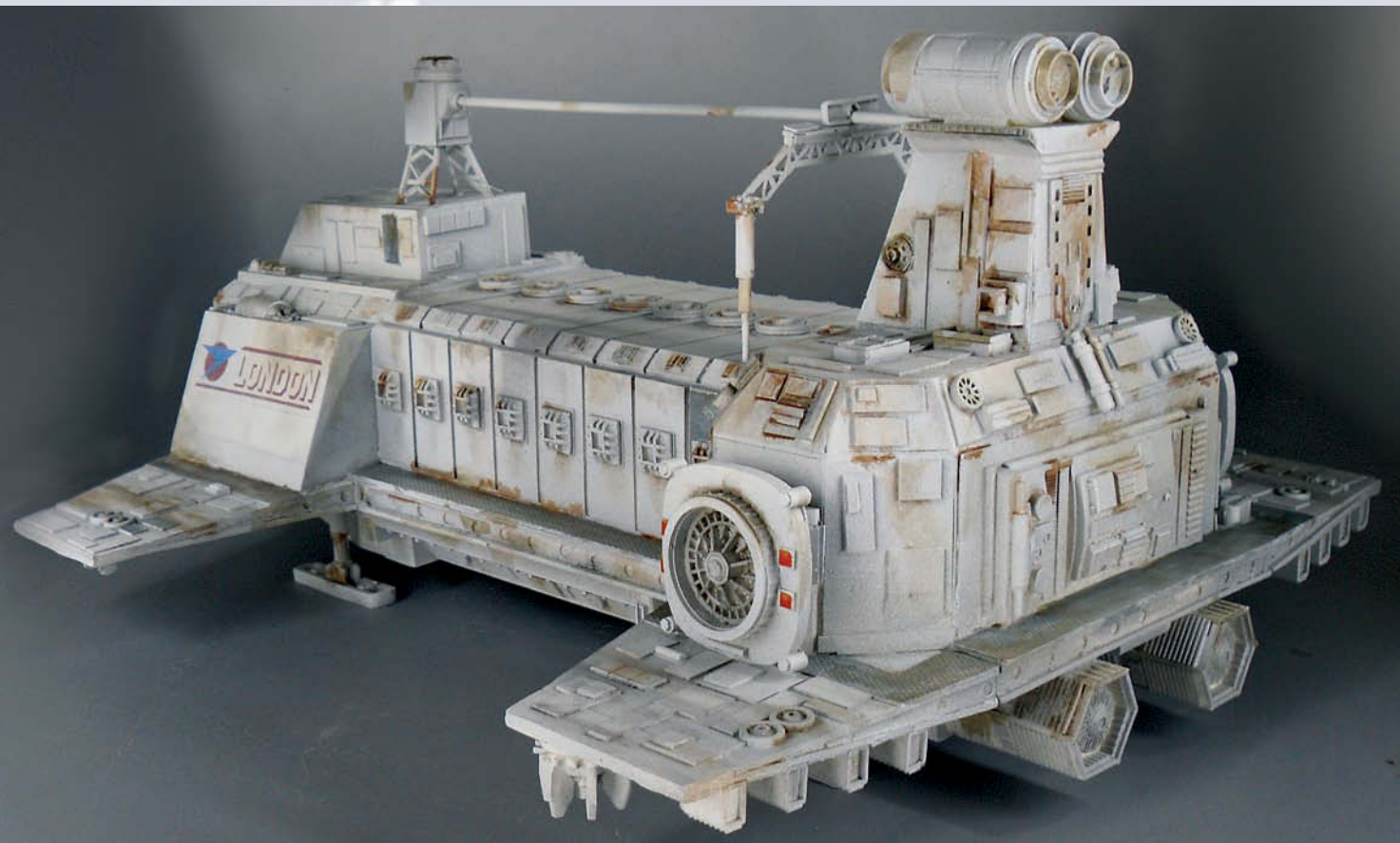
And there she sat... Squat. Grimy. Dirty... *Finished* (well - not quite, as it turned out - please see postscript below)!

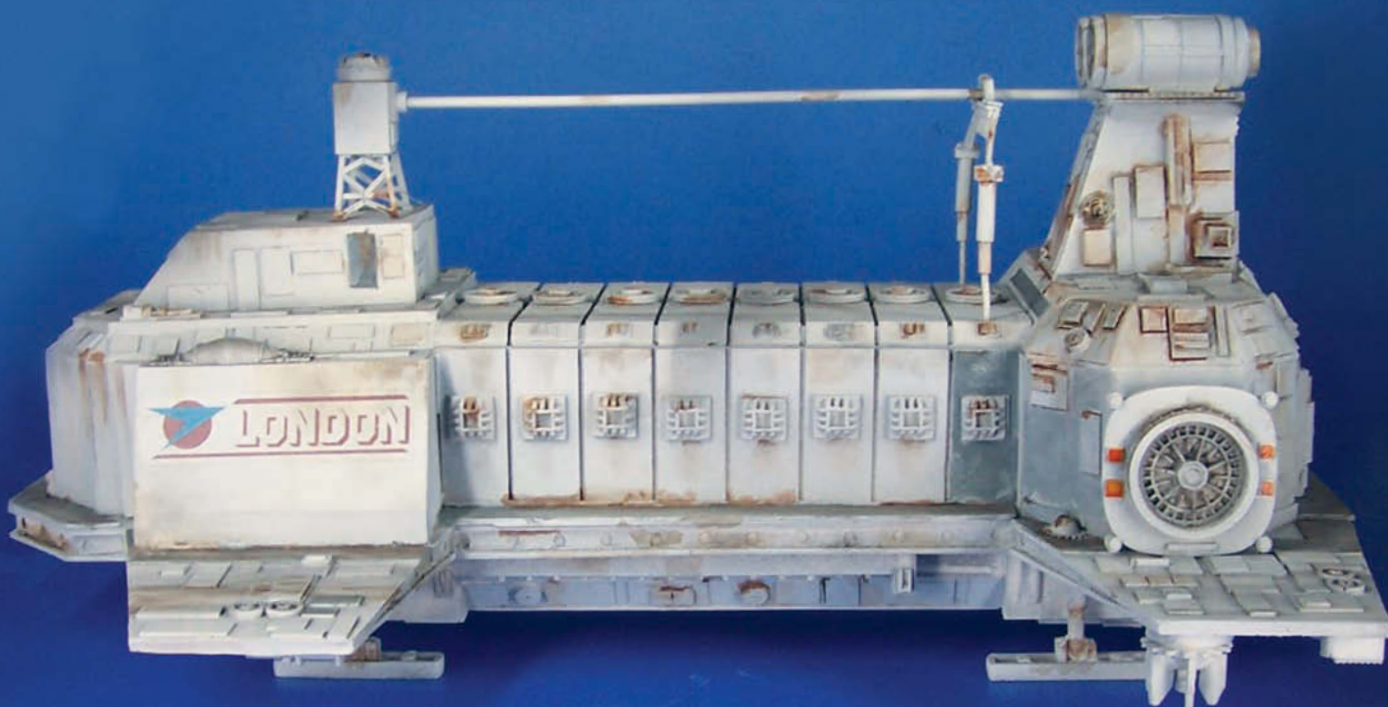


A capital enterprise?

This is an unusual subject, well sculpted by esteemed modelling maestro Alfred Wong. It's an impressively scaled model too. Some of the small panel detailing differs from the original but to expect every single panel to be replicated exactly would be unreasonable. I could have done without

the gaps between upper and lower bodies, but these can be eliminated fairly quickly and without too much fuss if you're happy to use filler and possess reasonable modelling skills. At \$275.00 (£191 at time of going to press) this kit will likely only appeal to the serious **Blake's 7**/studio scale modeller... but then it does deliver you an awful lot





of resin (and nostalgia) for your buck, and builds into an unusual and striking replica.

Postscript

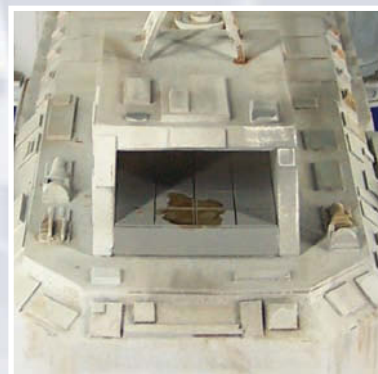
It's always the way... you're right on deadline with an article... the presses are being brought up to speed... and suddenly some new information becomes available. In visiting aforementioned model maker and illustrator Simon Atkinson's excellent site simonatkinsoncreativearts.webs.com I discovered in his model-making section a shot of the original *London* miniature, which he created, that I hadn't seen before. Although fairly low res, this clearly revealed, allowing for the age of the model, a far dirtier and rusted beast than I'd portrayed at weathering stage with my build. It was therefore back to the eleventh hour drawing board where I added copious amounts of *MIG Pigments Streaking Rust* and *Streaking Grime* to the craft. I then brush painted the walkways around the centre of the *London* in a mid grey, dirtying them down with the aforementioned streaking agents, painted the *Saturn V* kitbashed pieces that sit on top of the slab-like sections at the front of the ship at both sides in silver, picked out the four raised rectangles that skirt the airlock tubes in orange, then attacked the ship with fine grade sandpaper to further streak and distress it.

The result was a far grittier version of the *London* – great fun to produce, and far more satisfying to look at as a representation of a beaten up old spacegoing cargo vessel. *Brilliant!*

Review kit kindly supplied by Titan Find.

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Round 2
22" build &
research story

Brian Johnson
interviewed by
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Eagle 1
studio miniature
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COMING SEPT 13

Modelling: 1999

The Eagle Has Landed



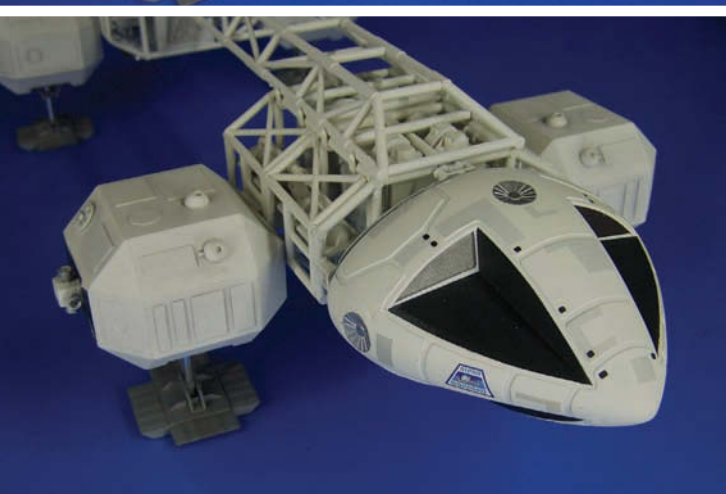
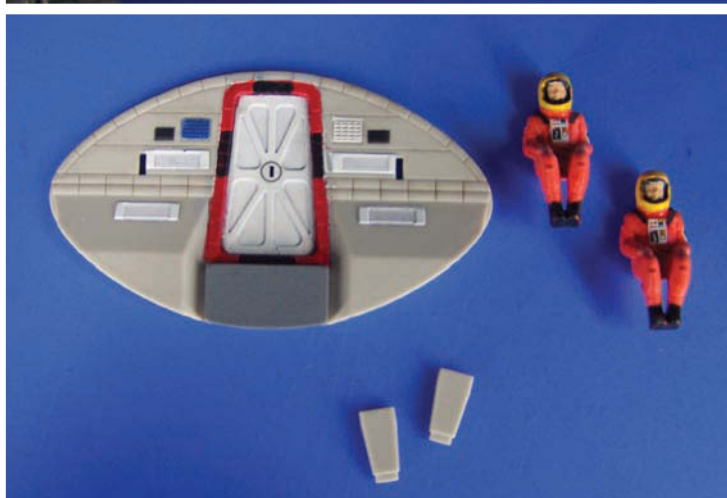
Mike Reccia builds the new 22-inch MPC Space:1999 Eagle kit Part two of two

LOOSELY BASED ON THE HEAD OF A GRASSHOPPER, THE DECIDEDLY INSECTOID ‘BEAK’ OF THE *SPACE:1999 EAGLE* is one of its most iconic features, bringing an organic quality to Brian Johnson’s inspired design and making the *Eagle* a *Space:1999* character in its own right.

This section is recreated in the new *MPC* 22-inch kit via the bringing together of top and bottom halves, four transparent window parts, a one piece rear section and an interior comprising a detailed bulkhead, two pilots and two strut pieces that connect the figures to the rear wall via slots in their backs and position them at the correct height so that their heads can be seen through the windows. The four circular attitude thruster dishes (or whatever these actually are – their function has never been revealed and was

never referred to or seen in operation in the series) complete the line-up.

Black waterslide decals are provided for the four indented ‘pie slice’ sections of the beak that protrude forwards from the windows (two decals per section), but as I was assembling a test shot of the kit these were not available to me until later in the build when the command module had already been completed. Besides, I felt that it would be better to *paint* these black sections onto the model as I personally worry about large decal panels peeling or flaking or becoming subject to damage over time, regarding paint as a tougher, more permanent option, although it takes a little more preparation and time to achieve a comparable finish.





My first move was to glue the beak halves together and lightly sand back the hardly perceptible central join line created by doing so before priming the beak front and its rear section. After priming I treated everything to a coat of *Ford Diamond White* auto spray, carefully masking off the areas that needed to be black once this was dry then spraying these with *Tamiya Matt Black* acrylic.

Recreating a first-season subtle pattern of contrast panels on the beak as closely as I could I masked off the approximate area of each panel and sprayed these with a mid grey. I then dusted over the grey areas with the *Diamond White* to lighten them and tie them in to the rest of the paintwork.

At this stage I could add the window panels. Each is an excellent, tight push-fit into its respective position, so it was simply a matter of masking the raised 'window frame' on each piece and priming this before spraying it with the *Diamond White* then securing each window in place with the tiniest drop of glue to its bottom edge where it locates against a slot inside the beak front.

The beak has been designed so that the front half push-fits against the rear, and can be left unglued if desired so that the modeller can be the envy of his or her friends as he or she deftly removes it to reveal the inner bulkhead and pilot figures. This bulkhead beautifully replicates the detailing of the full-size set (no mean feat, as the proportions of the live action set differ considerably from the proportions of the studio miniatures) with its central doorway flanked by various panels and grills, and it was this that I set about painting next. A note here: to be strictly accurate the modeller may wish to substitute a simple replacement scratchbuilt bulkhead with minimalist simple raised block detailing, the whole thing painted in orange with a couple of black vertical bands to the side of each pilot figure – sliced off at the torso – as per the interior of the 44-inch studio miniature. The new kit's version is far more ambitious and accurate to the fictional world of the series, however, and only the most zealous *Space:1999* modeller is likely to plump for the former, more austere option, methinks.

I felt that the tan/mushroom grey the test shot was moulded in was serendipitous in that it



replicated the base colour of the *Eagle* cockpit rear wall perfectly, so I simply sprayed this with *Citadel Purity Seal* to disguise its plastic origins and give it a slight sheen before masking the door area and various panels and spraying or brush painting them in their respective colours. Number roundels are provided for the centre of the door (a decal sheet had, by this time, been express-mailed to me hot from the presses courtesy of *Round 2*... I chose the '1', naturally) and the decal was duly applied. Following some subtle shading with *MIG Pigments* to bring out the depressions in the door, door surround and the tiles to either side of it, the bulkhead was again sprayed with *Purity Seal* to tie everything together and seal in the decal.

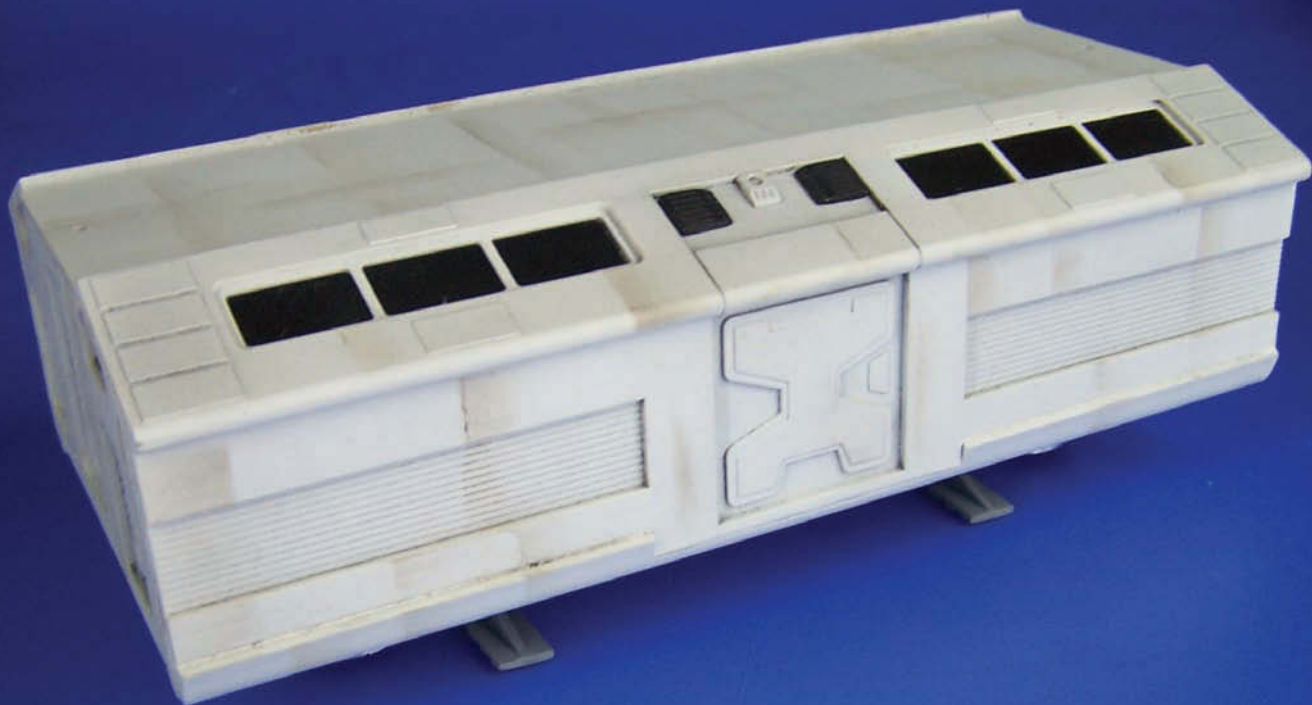
Next up were the pilots, these being half scale representations of the *Gemini* kit astronaut figures used in the 44-inch studio miniatures. Following the brush-painting of the orange suits, yellow helmets, seat belts and flesh of faces and hands, I picked out their chest packs in white before applying the tiny decals provided over these, plus the shoulder badges to right and left arms (the amount of detail this kit offers is remarkable).

Having fixed the pilots to their struts and the struts to the rear bulkhead I glued the bulkhead to the inside of the rear beak part and test-fitted the front of the beak over the assembly, only to discover that a formerly perfect push-fit was now snagged by the edges of the bulkhead. I therefore carefully removed the part from the beak rear and sanded down its edges until the front would fit over it without catching on it.

A final move for this section was to push-fit the beak rear into the four docking clamps on the front cage section (alternatively you can glue this in place – you will, however, permanently cover up the access door to the walkway if you do so).

Whether to weather

Despite appearing to be mostly white on screen (with the obvious black and silver bits, of course), the *Eagle* does, in fact, sport quite a number of panels in contrast light and mid greys and blue-greys, plus panel lines over all the surfaces of the beak, leg pods and central pod, with a huge amount of decals of varying sizes to detail everything off.



The first decision I made was not to include the panel lining. At this scale I felt it wasn't necessary, and I would have struggled to find a sufficiently thin lining pen (come back *Rotring*, we need you!). I decided instead to add as many of the grey panels as I could, and, poring over as much reference as I could find, I created these via a variety of methods, in that some were masked off and sprayed on, others were brush-painted on, and a select few were added as decals as a result of applying subtle grey and blue-grey areas cut from decals found in the spares box.

The decal sheet accompanying the kit offers a wealth of detailing, including the distinctive

orange rectangles that adorn each leg pod plus certain of the larger fuel tanks (these were originally adhesive *Sasco* office year planning system labels on the 44-inch miniatures), the symbols originally supplied by *Letraset* and intended to denote sinks and baths on architectural drawings and blueprints, and the 'commas' and 'full stops' (also originally by *Letraset* from various of their typeface sheets) featured extensively on the beak, leg pods and passenger pod. These were carefully applied according to reference shots of the original miniature found on the net, then everything was sealed in with sprays of *Satin Purity Seal*.



From a point in season one of *Space:1999* the 44-inch *Eagle* began to sport a number of coloured bands in reds, oranges, greys and silver around the girderwork of its top frame, particularly along the front and rear edges. These, I feel, add scale and definition to the craft, and so I decided to add them to my build. The bands are not provided with the decal sheet, so it was again a matter of scouring the spares box for areas of appropriate waterslide colour that could be cut down and applied to the frame. In some cases I also used white adhesive paper labels sprayed grey, cut to length and wound around the frames, these providing the same crisp edges to the banded areas as the decals.

The *Eagle* is comparatively lightly weathered, with the pre-shading applied to the various sub-assemblies in part one of this article proving quite adequate in reproducing the look and feel of the original miniature, so at this stage I stood back from the *Eagle's* various modules and declared them *completed*.

Slot A into tab B.

Taking the spine assembly with the beak in position it was then simply a matter of slotting in the leg pods and positioning the pod between the front and rear walkways. Two small self tapping screws that secure the pod to the two slots on the spine framework are provided with the kit (but weren't present in the test shot). The fit of the pod was tight enough on my build to hold it in position, however, pending the tracking down of a pair of suitable screws.

The Production Kit

Before you even open the box there is the excitement of the cover art to take in – a beautiful rendition of a couple of *Eagles* over *Alpha* painted by Round 2's own Jamie Hood – give that man a rise, Round 2! Would also be great to see this offered as a poster at some stage – I want this on my wall, framed.

Within the large box the production *Eagle* differs from the test shot only in small ways. The crispness of parts has been ramped up, the foot pads are now two-part upper and lower half assemblies, and the pads, pod feet, engine assemblies, RCS thrusters and leg suspension parts are moulded in grey plastic, with everything else being presented in the off-white of the test shot – excepting, of course, the transparent windows for the beak and passenger pod which replace the slightly frosted look of the early parts supplied with my build.

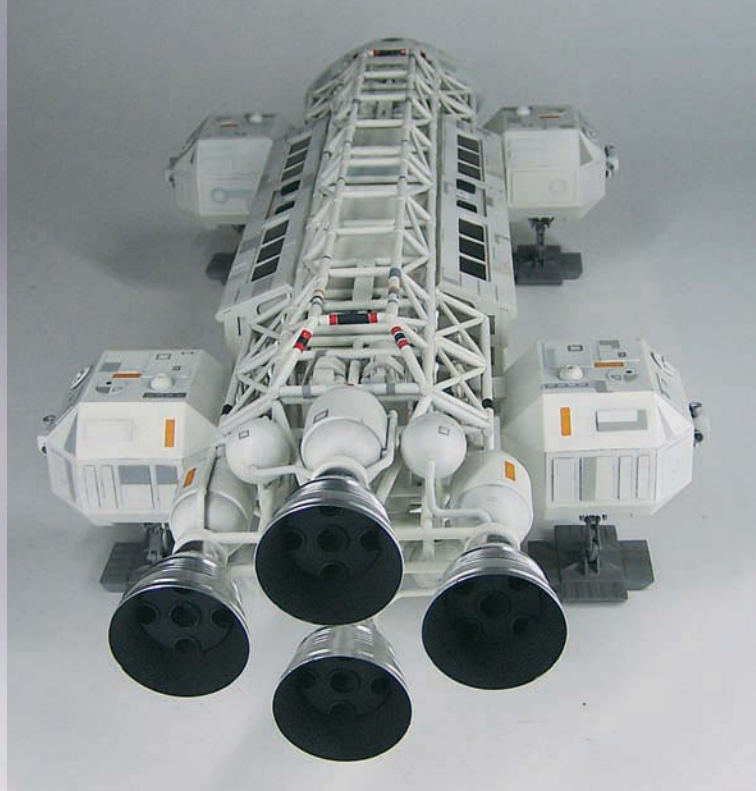
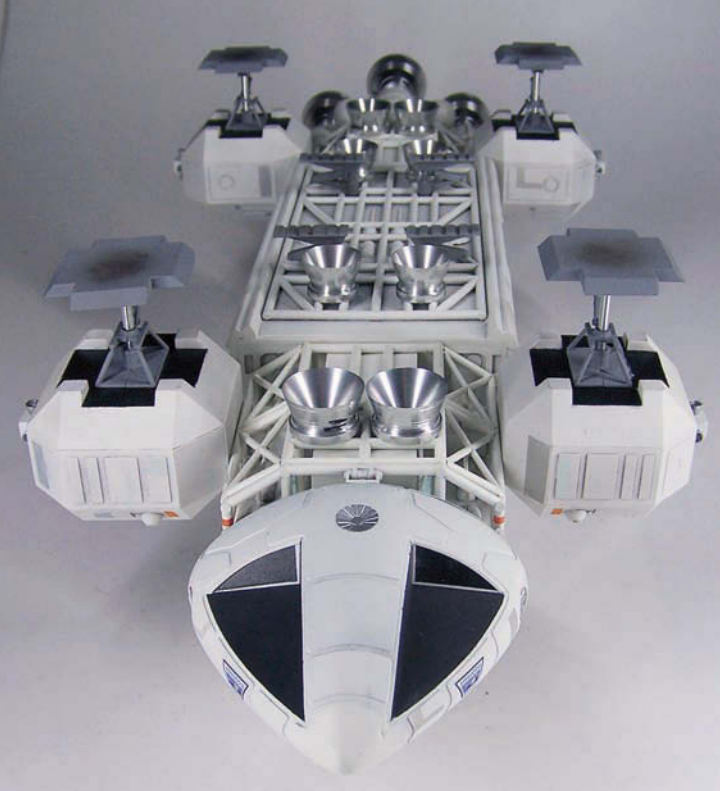
Deluxe Accessory Set

As an alternative to the plastic engine bells supplied with the kit this accessory set offers all the large engine bells (rear, underside and underside passenger pod) as machined aluminium parts, together with aluminium oleo struts for the leg pods. The serious *Eagle* builder will have to have these, as they are quite superb, but expect to pay around the same price for this set as you do for the kit itself. You can't beat the look of gleaming aluminium engines on your *Eagle*, though... and using this set means you can free up the kit's plastic engines for use on additional *Space:1999* scratchbuilt projects (!).

Small Metal Parts Set

This further set comprises the sixteen RCS thrusters in aluminium to again replace the plastic standard parts that come with the kit. As with the parts of the deluxe set, they look absolutely superb... but a word of caution here – the thrusters are relatively tiny, so work over a tray when handling them or there will be tears before bedtime.

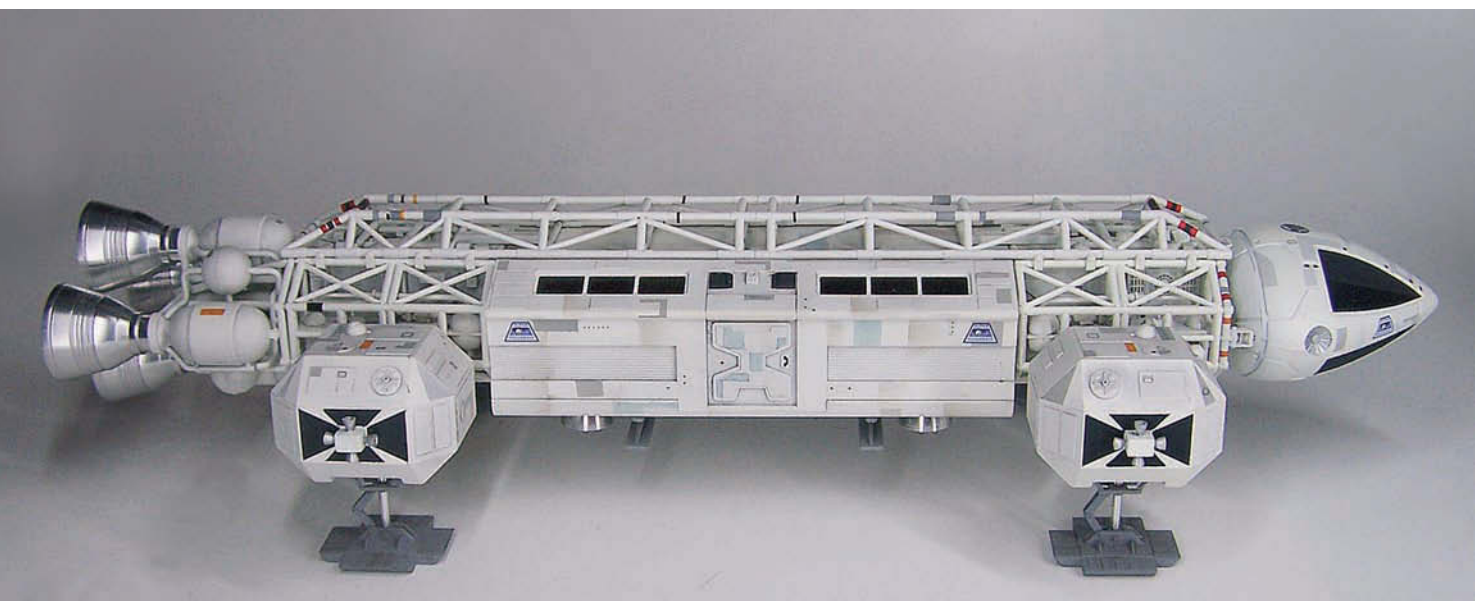


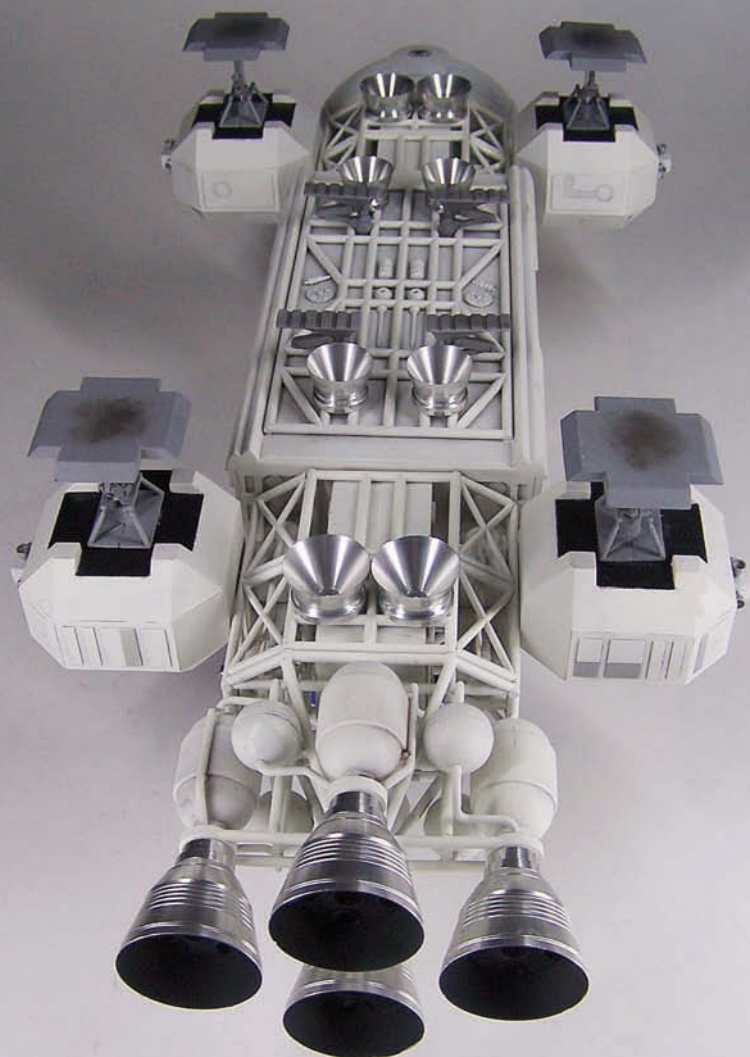


Epilogue

Is there anything not to like about this kit? About the only (small) niggle I can drum up as devil's advocate is the pipe configuration to the rear fuel tanks. This particular layout of feed pipes is not something I can ever recall seeing on any shot of any *Eagle*. The established look is a reverse 'C'-shaped pipe that connects the two circular tanks to each other at their rears via their centres, and then a further pipe that curves downwards from the front centre of the top circular tank and another that comes upwards from the centre of the bottom

circular tank to almost meet, these then bending at ninety degrees to disappear into the rear of the rear cageworks. Similarly the large fuel tanks are almost always seen with small pipes running across their tops through a central thicker diameter section, rather than the ones provided with the kit that disappear into the rear framework. Now I'm not saying the kit's layout is wrong, and this configuration may indeed be correct as the earliest, straight from the modelshop rendition of the first 44-inch *Eagle* produced, but it's not something I've come across, and some





Eagle fanciers might choose to replace the piping with the layout established in many publicity shots and much onscreen footage.

Possibilities

Oooh, this kit is destined to generate enough creative juices to marinate oneself in! The slot-in leg pods, for example, allow the ambitious modeller to scratchbuild a replacement, torn-open and damaged pod, as seen in several episodes, slotting that in at times to simulate realistic battle or crash-site damage. One of the front leg pods can be drilled and fitted with a scratchbuilt recovery arm to mimic the equipment seen in season two's *The Exiles* and other episodes. There are also additional top and side boosters to consider plus, of course, a variety of passenger pods and pod variants – although one's fingers are tightly crossed that *Round 2* will also make some of these options available in kit form in due course.

To sum up, this release is inspired, wildly ambitious, accomplishes all it sets out to, and has to represent my favourite injection plastic SF kit subject of recent years, if not ...well... quite possibly *ever*. But then, I do love *Eagles*...

Review test shot and deluxe accessory kits kindly supplied by Round 2.

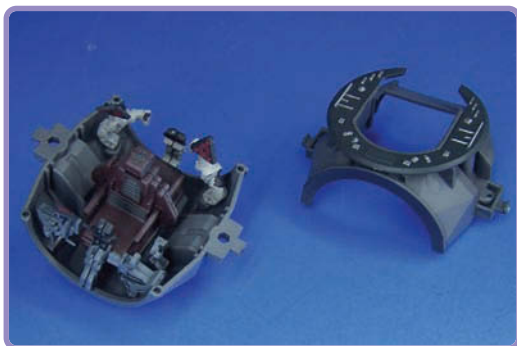
www.round2models.com

Special thanks to Jamie Hood for his help in making this feature possible.



‘Use just force, Luke!’

Will Revell's new snap Force Awakens kits cut the mustard with older modellers, asks Mike Reccia



Top to bottom:
assembling the
TIE Fighter
cockpit sphere
with its opening
hatch and
various guns.

THAT MOST EPIC OF RECENT GENRE MOVIE EVENTS – **THE FORCE AWAKENS** – must surely, prior to its release, have caused many modellers to imagine a veritable Christmas morning of new craft designs, making them *oooh* and *aaah* in anticipation of the must-have scaled treats that would subsequently beckon from kit store shelves.

Instead, rather than a galaxy of all-new designs, we were introduced, for the most part, to updated versions of iconic **Star Wars** craft, plus the return of the franchise's venerable 'hunk of junk' – the *Millennium Falcon*. Not that I'm complaining, you understand – I love the 'new'-look (actually drawing heavily from original **New Hope** Ralph McQuarrie artwork) *X-wings* and the beefier black *TIE fighters*... and what's not to like about the *Falcon* (Even that odd-looking replacement oblong 'dish' is growing on me. A bit.)

In the Western world initial **Force Awakens** kit releases have proved to be the exclusive province of *Revell*, with the company, perhaps unsurprisingly, and in order to snag a new generation audience, aiming its wares squarely at younger modellers, offering a range intended for children aged 6+ under the umbrella title *Build & Play Star Wars*. These easy-to-assemble kits snap together with no need for glue, paint or tools, each subject incorporating three different sound clips and some including lights, the models becoming tough, functioning toys on completion. The selection comprises the *Falcon* (21cm, 19 parts), *First Order Special Forces TIE Fighter* (13cm, 15 parts), *Poe's X-wing* (22cm, 18 parts) and the *Resistance X-wing* (22cm, 18 parts).

The company has simultaneously released *Easykit Star Wars* versions of the above for modellers aged 8+ or over (I think I can safely say most readers will sit within this category) and feature pre-painted parts that clip together. Subjects to date are even larger versions of the *Build & Play* kits plus *Kylo Ren's Command Shuttle* (18cm, 53 parts).

It has to be said, especially since the company has at the same time released its range of (small but perfectly formed) **Star Wars** kits for ages 10+ as 'more challenging' subjects in various scales requiring glue and paint and featuring engraved surfaces, replica cockpits, figures and display stands (includes the *Falcon*, *X-wing*, *Darth Vader's TIE Fighter*, *TIE Fighter*, *TIE Interceptor* and *Snowspeeder*), that it's disappointing that similar versions of the FA releases could not have not been made available to satisfy modellers who are no longer in short trousers. The huge mature modeller-fanbase out there lusting for hardware



Left:
TIE Fighter wing
components and
rear view
showing gunner's
window.

kits based on the new film they can sink their teeth into must therefore go hungry at present.

...Or must it?

Beating down my aversion to snap together kits (I was locked in a cupboard with one as a child) I decided to build *Revell's* new *Force* offerings straight from the box (in some instances my self-appointed non-interference directive gave way to temptation and certain of them ended up as not-quite-as-from-the-box, as you'll discover) to see whether they might in any way satisfy this title's readership. Allocating *Kylo Ren's* shuttle build to esteemed fellow modeller Andy Pearson (see review in part two of this feature) I turned my attention to the first of *Revell's* remaining four releases:

First Order Special Forces TIE Fighter

Simple construction is offered here via six large sprues of parts. My first niggle at this juncture concerns the inordinate number of attachment points connecting the wing/frames to their surrounding trees. If building this kit without repainting it it is virtually impossible to release these parts without marking and/or scuffing their edges in some way during the process. This is a pity as the wings are otherwise impressive, the two sections per wing snapping together to form detailed and pleasingly large sub-assemblies.

Next up is the cockpit 'sphere' which features a well detailed interior with the distinctive consoles seen in the film, sporting nicely-rendered displays

and graphics, push-locating around the back to back seats. Sadly, and this is the case with each of these releases, the kit does not feature crew figures. Now one could speculate that this omission is perhaps due to the powers worrying in case tot-modellers might regard these as an appetising snack if included, but there are smaller parts in the line-up than the figures would be were they in evidence, so why the lack of pilots, *Revell*?

With seats and consoles located in the lower cockpit interior half the upper half is added and a horseshoe-shaped, pre-painted panel pushed into the top section, allowing this to be visible inside the craft through the opening hatch, with its push-fit inner transparency and hinge, once this is in place.

Much is revealed regarding the film's upgrade layout of the fighter from this kit, as the next part to be installed is a curved transparency that serves as the gunner's rear window, this locating into the back half of the cockpit 'sphere', to which are also added the top hatch and hatch hinge retainer. The cockpit transparency is then pushed into the front half, the framework of this being nicely pre-painted. However, the piece sits a little proud of its surround and its edge is transparent rather than painted, an odd look the purist will want to rectify.

After snapping a bottom piece to the inner cockpit the two halves of the sphere are closed around it, two guns are located into the lower front, the inner central circle of detail is connected to each wing and an outer wing central detail piece is pushed into place. A gun is added to the top right shoulder and the model is snapped onto its stand, completing the project.

Irresistible Tweaks

The *TIE* looks far too plastic-y without some adjustment being made to its finish. I therefore gave the whole craft a quick spray with *Citadel Satin Purity Seal* to dull everything down. Strangely the stand is moulded in the same colour as the craft, giving it the appearance of being an integral and incongruous part of the *TIE* when in place rather than a separate display support. I couldn't live with this look, priming the piece then spraying it in a light metallic blue, just to set it apart from the *TIE*.

Finally, not tweaked but noted were the gaps top and bottom where the two halves of the cockpit sphere met (or didn't, quite). This is one of my biggest objections to snap kits. If the system is to be used, at least make sure that it works, and that mating surfaces come together tightly rather than leaving gaps in the finish. Modellers reworking



Above: Poe
Dameron's
X-wing Fighter
with under-
carriage but,
sadly no
Poe Dameron!

this subject will, I'm sure, want to excise most of the snap system and glue their *TIE* together, subsequently priming and completely repainting it. This having been noted, with a complete glue-together and repaint overhaul, the *TIE* will make up into a large and impressive display model.

At heart this is a nice kit that could have been even nicer had it been made available without the snap system.

Poe's X-wing Fighter /Resistance X-wing Fighter

These two subjects are essentially the same kit sporting different liveries. Construction is very simple, consisting of clicking various panels, intakes and piping into the two wing sections, slotting these together so that they pivot, then seating them into the main hull which snaps shut around them (a pre-painted cockpit tub and an opening cockpit transparency having been first installed, plus a cockpit rear window and hull rear plate). A choice as to 'undercarriage up' or 'deployed' modes has to be made, and each *X-wing* is then completed by adding push-on jet exhausts to the engines, snapping wing tip weaponry into place and, finally, sitting the craft on its four-part (contrast black) stand. ...Oh, yes, and there's a two-part *BB-8*-type droid (well, it is actually *BB-8* in the case of *Poe Dameron's* black and orange fighter) that snaps together and is then located into a well behind the cockpit.

Tweaks; likes; dislikes.

Overall these are pleasing little kits. As opposed to the *TIE*, the fighter's hull snaps together snugly without leaving any gaps, and the contours of the new *X-wing* seem to have been followed fairly faithfully. The wings, however, whilst pivoting, do not close completely, and some kind of click-shut feature would have been welcome here. Modellers wishing to exhibit their fighter on the ground sitting on its undercarriage will therefore need to make adjustments. Again there is no pilot figure, making the inclusion of one sourced elsewhere an absolute necessity if the ship is to be displayed on its stand in 'open S-foil' mode by the discerning modeller.

Tweaks consisted of a spray of *Purity Seal*, (including a light spray over the gleamingly clean cockpit transparency to dull it down /dirty it up a little). Various *MIG Pigments* were also used to bring out the panel detailing and add the appearance of scuffs and chips, particularly against the black of *Poe's* ship.

Overall a good subject, cleanly presented, but one which mature modellers will be champing at the bit to add to, modify and repaint.

Millennium Falcon

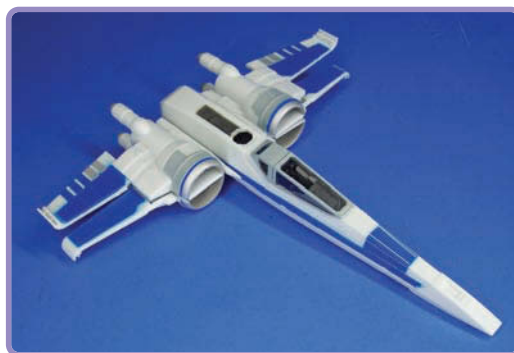
This is essentially a retread of the company's earlier snapfix *Falcon* offering, with a selection of new parts (alternative landing gear, oblong 'dish', a choice of boarding ramp) enabling the modeller to make up either the original version *Falcon* or

incorporate the Force Awakens' slight modifications. This is definitely the most toy-like kit of the new selection – the contours are wrong (it's too fat), the detailing all over the surface is an approximation of that found on the original (the turret guns are particularly poorly shaped and detailed) and the various side snap pieces are an absolute b****r to line up and keep in place when joining the hull halves together – so much so that I superglued some of them to the surrounding hulls because they simply wouldn't stay put as I repeatedly attempted to mate the hull halves. Kids will definitely need a modicum of help from mums and dads when assembling this one... with mums and dads, having calmed their outer child, subsequently needing a little counselling in order to quieten their inner one.

Tweaks and observations

The kit's appearance can be much improved by weathering and streaking the *Falcon's* surface. I used *MIG Pigments* powders and washes to bring the ship to life, sealing everything in with a coat of *Citadel Purity Seal* once I was satisfied with the look. Working to deadline, I only added an approximation of the myriad streaks and pitting seen on the original *Falcon* studio miniatures, but modellers taking their time will be able to do a much better job, and make the model look so much more authentic.

A sage final word here goes to Andy Pearson... In discussing this kit's shortcomings with him, he noted that, if you were a child, and wanted a



Left:
the standard
Force Awakens
X-wing kit
assembles into a
good looking
replica, enhanced
here by further
weathering.



Top: Force Awakens modifications to the standard *Falcon* kit: revised loading ramp, undercarriage and dish. Right: lower hull with undercarriage in place showing limited pre-painted details. Below: completed *Falcon* from rear-side panels need some persuasion in order to sit properly.



Millennium Falcon, this kit would seem absolutely awesome to your young eyes and you could quickly put it together and fly it around the room, reliving moments from the film.

...And that, I suppose, is the ultimate point of each of these releases... to provide an upcoming generation of modellers/*Star Wars* fans with something they can rapidly assemble and play with. As such, the subjects fulfill their roles perfectly. It's just a pity that more serious versions of the craft have not been made available so that slightly older and more demanding modellers like you and me can enjoy building faithful replicas of what we've seen on screen and desire to see replicated on our shelves at home.

...May the Force be with *Revell* in perhaps considering the addressing of that need at some point when planning future FA releases.

Review kits kindly supplied by Revell. Revell model kits are available from all good toy and model stores.

For details visit: www.revell.de/en



The completed *Falcon* – overly weathered 'mandibles' and rear engine section come pre-painted, additional streaking and weathering was added plus an overall spray of *Purity Seal*.



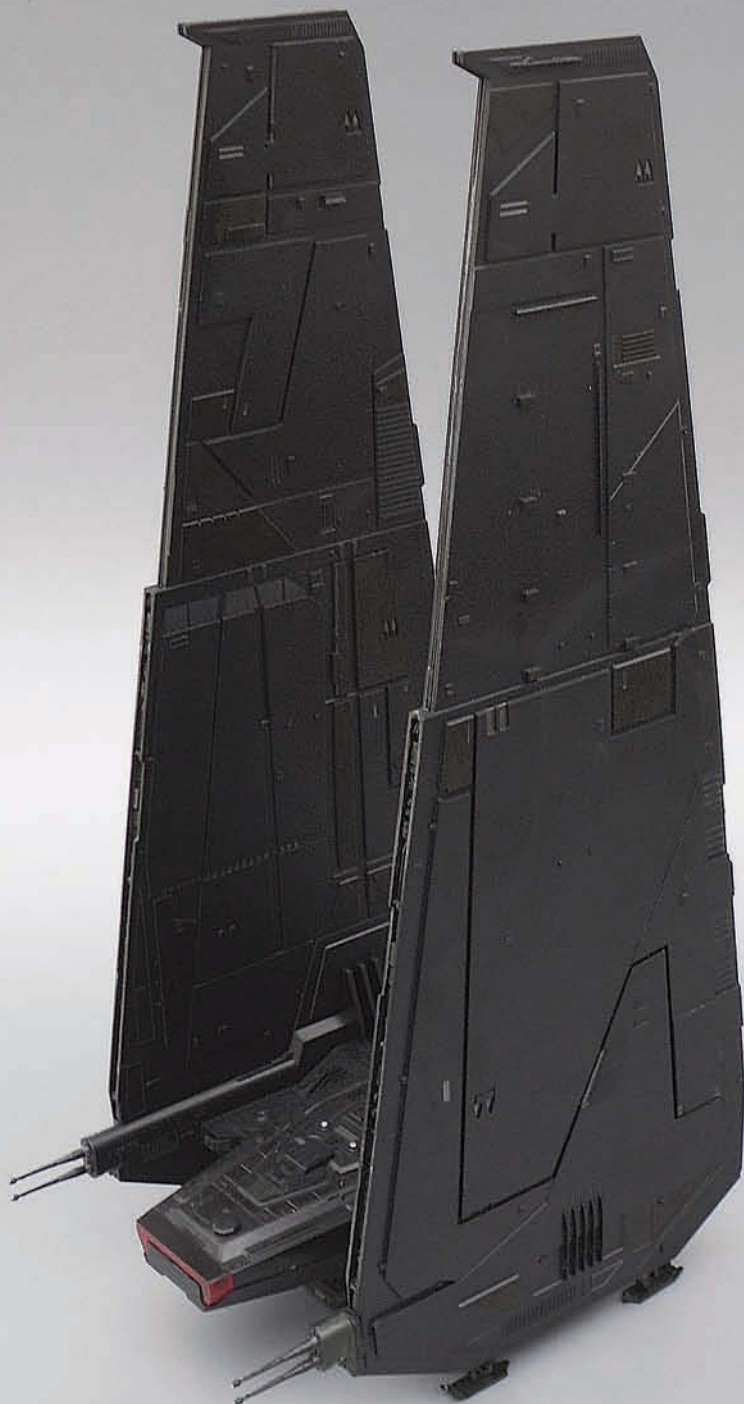
HERE'S THE PERFECT KIT FOR THE **STAR WARS** FAN WITH LITTLE TIME ON HIS OR HER HANDS AND THE IDEAL GIFT FOR JUNIOR RECRUITS TO THE MODELLING HOBBY. It's also makes quite a lump of a finished model at 356mm high by 183mm wide, which probably enhances its appeal to the junior spacemen as much as it being an *Easy Kit* aimed at the 8 years plus age group will.

It comes in black plastic with pre-painted detail and a set of alternative parts allowing the modeller to choose between landed or in-flight versions although, should you choose the latter option, there's no stand.

I found myself in my more-or-less default position when presented with this kit inasmuch as I immediately started thinking of ways that I could make my own mark on the model. In this case that was going to be in the painted finish. Having said that (and apart from some pre-painted dark grey elements) the shuttle is black with black panels and black details on an overall black background so the questions was what to do other than to pick out some of the panels in, well, *black*.

Of course, there are blacks and there are blacks and, depending on what sort of pigment one chooses, there are subtle differences. This is not so much as a result of some blacks being blacker than others but in the refractive nature of some paints and inks.

Addressing this topic prior to assembly meant that I could experiment on the inner surfaces of the model which would be concealed once the kit was assembled. This led me to choose two *Games Workshop* products and develop a distinct preference for one of those. Once upon a time they used to sell a black ink for pinging out the detail on their orcs, dwarves, space marines and shop staff. This product seems to have been discontinued, although I do have some in stock at home, and there is now a *Nuln Oil* from the same company. This is thinner but is, I imagine, intended to do the same job although it doesn't



SWIFT SHUTTLE

Andy Pearson builds Revell's Force Awakens Kylo Ren's shuttle kit

Top to bottom:
 The bits from
 the box.
 Colour test on
 inner hull.
 Insert to wing
 root.
 View of weapons
 and inserts.
 Completed wing.
 Some clean-up
 needed on
 weapons.



work as well when painting contrasting panels in black. Did I mention that there was some black involved with the shuttle's colour scheme?

Having given all the parts a wipe over with methylated spirit to remove any mould-release agents I picked out various panels on the fuselage and wings. The original formulation of the ink dries in minutes and I also used some of the new oil (to me) to run into some grilles and panel lines. The only other enhancement was to highlight some tiny recessed details using a very fine HB lead in a mechanical pencil.

The next stage was the assembly of inserted contrast panels and weapons in the wing root area of the lower port wing half. This was followed by two longer panels along the trailing and leading edges which would be held in place when the upper wing half was added. I found a little judicious cheating helped here and held them in position with a drop or two of polystyrene cement.

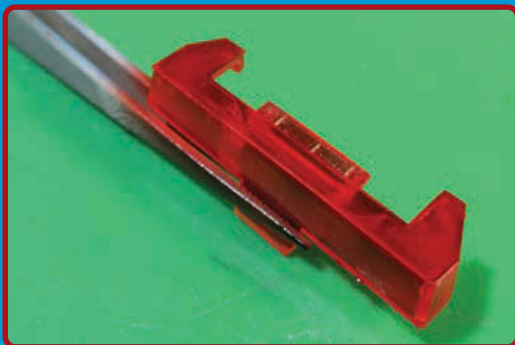
The same procedure followed for the starboard wing but I found that the pins and retaining holes for the guns needed a little work with files before they would fit. The retaining rails were next added to the forward ramp, followed by the addition of the pilots' seats and control panel (one piece) and the cockpit rear wall (another piece).

The ramp is secured in place by an internal box section which also gives considerable depth to the



This page:
 Inserts and guns
 to wing.
 Assembled ramp.
 Cockpit
 component pre-
 detailing.
 Cockpit detail.
 Detailing to
 cockpit bulkhead.
 Ramp in position.
 Internal retaining
 structure for
 ramp.
 Ramp—external
 view.
 Cockpit
 transparency as
 supplied...
 ...whoops!

This page:
 Repaired
 transparency.
 Repaired
 transparency with
 clear paint.
 Contrasting hull
 insert.
 Rear hull insert.
 Panel detailing
 to hull.



shuttle's interior when viewed with the ramp open. This was designed to push-fit over four pins but became immovable before it was fully in place. It became obvious that some delicate surgery would be needed as I could neither fully locate this part nor remove it to work on the pins. Positioning the handle of an X-Acto knife on each corner of this insert in turn and using a small hammer I beat the recalcitrant part into submission. This is not a subtle technique but a very therapeutic one.

Does injection-moulded plastic have a sentience? Is it capable of harbouring thoughts of revenge? I have evidence to suggest that it might, which I present in the chilling tale that follows.

It was a dark and stormy night... Well, actually it was the middle of a quite pleasant afternoon when I examined the only clear component in the entire kit: the cockpit window. The parts list highlighted this as a clear part but, obviously, the person doing the pre-painting hadn't read this as it was presented as an opaque red on top of clear plastic.

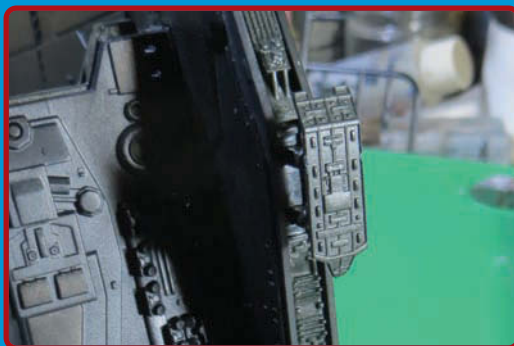
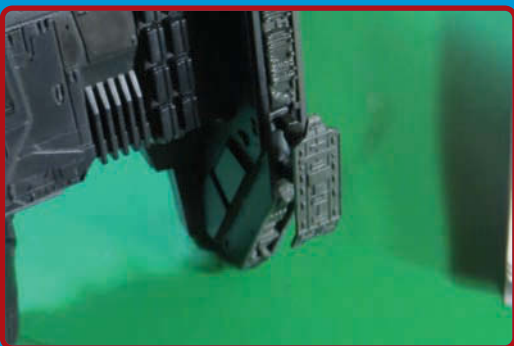
As there was quite a bit of detail (seats, etc.) within the cockpit and as I had picked out some of the moulding on the bulkhead behind using my *Games Workshop* ink technique I decided to remove this paint and airbrush the transparency with clear red. My paint removing agents of choice were isopropyl alcohol and methylated spirits applied liberally but gently with an old toothbrush. Not gently enough I fear for, as I reached the final stages of paint removal, a crack appeared in the top of the transparency and a large chunk simply fell off. Now, whether this was some sort of reaction to the chemicals (a career first for me if it was), the kit's revenge, or me being too heavy handed I don't know but the end result was in no doubt.

Some poly cement was used to prevent further cracking and a section of clear plastic card was added to replace the broken section, glued in place with *Micro Kristal Klear*. When the repairs were dry the cockpit window section was airbrushed with clear red acrylic. This, of course, meant that the repairs were visible but, on balance, I think that the approach produced a better result than the opaque paint would have. A later development would improve appearances significantly.

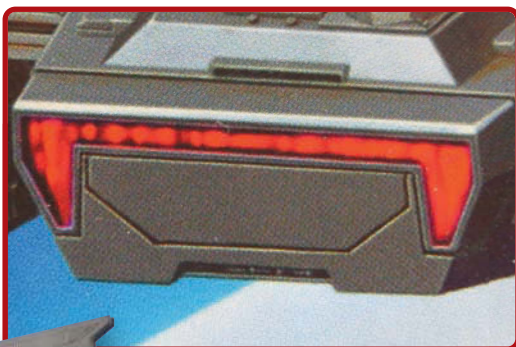
Further grey inserts were added to the lower hull and the upper hull was then added to



This page:
completed
cockpit section.
Engine bells at
rear of shuttle.
Wings with
and without
detailing.
Starboard wing
in position.
Landing leg
and pad.
Two views of
landing pads
in situ.



This page:
Cockpit
transparency
as built.
Cockpit
transparency
as depicted on
box art.
Plasticard was
used to duplicate
this look.



sandwich these and lock them into place. The two engines were then fitted, as were two further external details to the engine area. The wings push-fitted without any problems and it was then time to choose which version of the landing gear to use. As I was going with the landed version of the shuttle this meant adding the landing legs to the pads and fitting the five assemblies to the wing roots and the lower hull. A couple of these benefited from a drop of superglue as they were somewhat loose.

The model was now completed but giving it a final visual check showed up a minor anomaly. There is a variation between the cockpit canopy on the model and the box art. On the model (and in the instruction

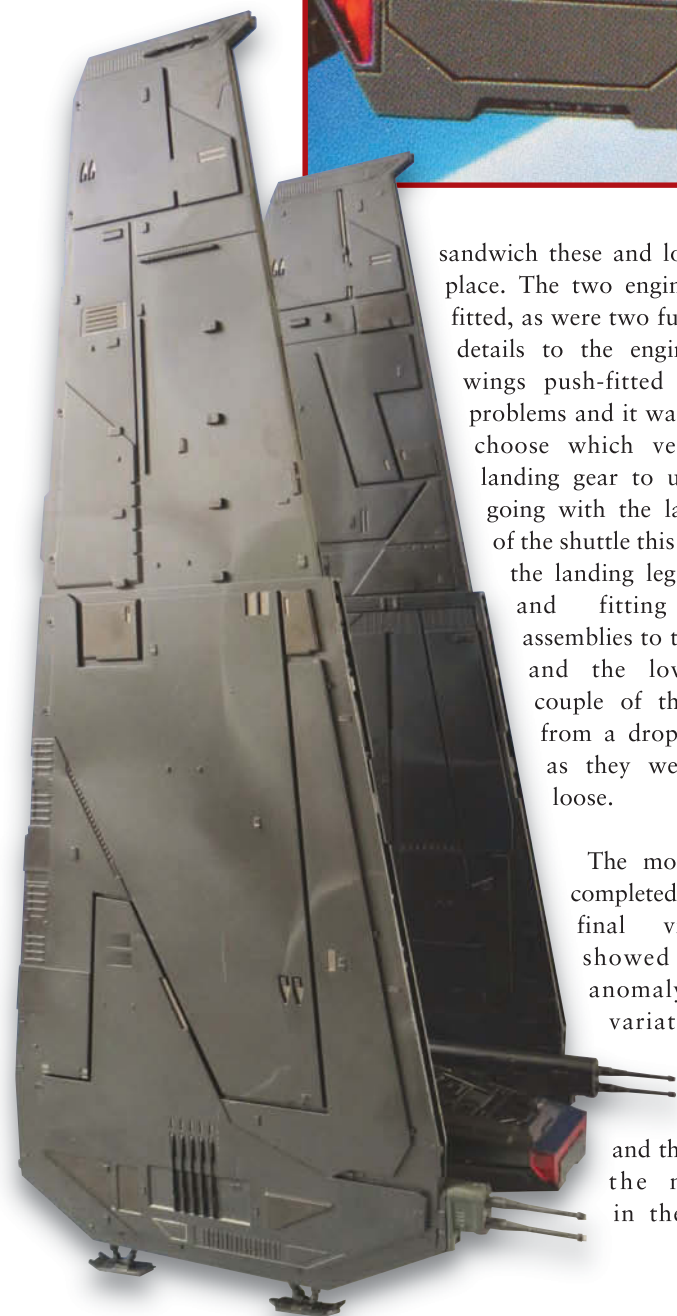
leaflet) the top of the canopy is clear but the image on the box shows the upper hull extending over it. I had, by this time, seen the latest episode of **Star Wars** but hadn't picked up this level of detail so it was back to the internet and a look at one of the trailers which showed the shuttle. Whilst this view wasn't definitive, my impression was that the cockpit did have a 'roof' so a section of very thin plastic card was cut to fit and painted. This addition also helped disguise my repair to the clear section. I like to think that factor didn't influence my decision to include it. I had promised to see the movie again with a couple of friends, this time in the 3D IMAX version, and viewing that showed that my conclusion was correct.

As I intimated in the opening paragraph this was a quick and easy build with no problems to speak of but, should it find its way into the hands of someone who will use it as a toy, I would suggest gluing the undercarriage components in place.

Review kits kindly supplied by Revell.

Revell model kits are available from all good toy and model stores.

For details visit: www.revell.de/en





OFF-WORLD HEALTH CHECK!

Building Wild House Models' MEC Medical Bay Console

Iain Costall

FOLLOWING THE RELEASE OF THEIR SUPERB *Stasis Pod* kit, *Wild House Models* have quickly established themselves as a company to watch, not only for innovative, unique designs but also for top quality castings and the kind of presentation you might expect from mainstream Japanese manufacturers.

The second subject in their *Hostile Realms* series is the 1/24th scale *MEC Medical Bay Console* which is designed as a companion piece for the *Stasis Pod*. As before, an additional plug-and-play electronics package is available for this kit to light the various screens and also interact with the circuitry of the *Stasis Pod*. This electronics pack was not included in the review sample so I incorporated my own lighting and built it as a stand alone kit.

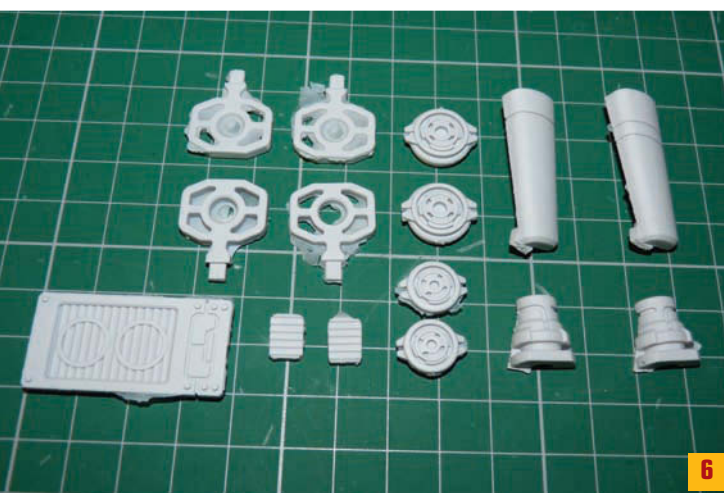
The kit itself arrived in a full-colour end-opening box which is illustrated with lots of useful colour renderings and information. (1) Inside is a

bag of light grey resin castings, a bag containing the pre-printed computer screens and a length of fairly stiff vinyl tubing. (2) A nice addition is a cast brass medical badge that has a clasp and pin should you wish to wear it. (3)

A set of glossy full-colour instruction completes the kit, along with a general guide to working with resin parts. (4)

The quality of the castings is first-rate with no major pour stubs to remove and only minimal flash, this mainly featuring around the open frames of the large console screens. Anyone with some experience of working with resin will have no issues here. (5, 6)

Optional parts are provided for the lining of the two opening compartments in the base units and these can be swapped around to suit the builder: one is empty, one features a control panel and the remaining two have an assortment of tools. I opted

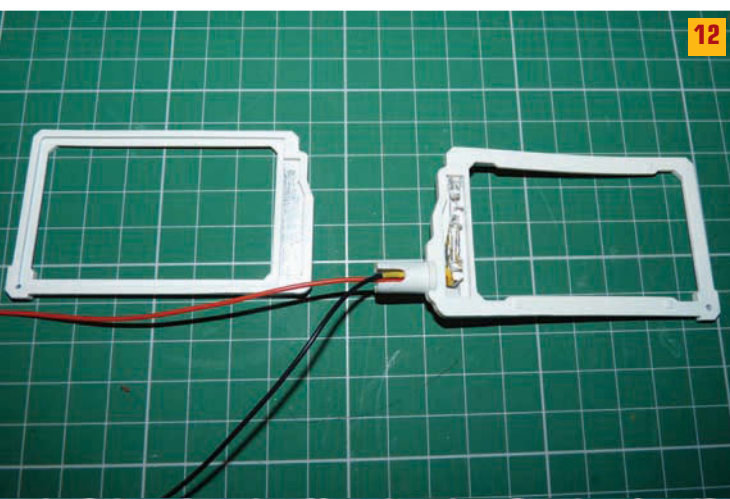




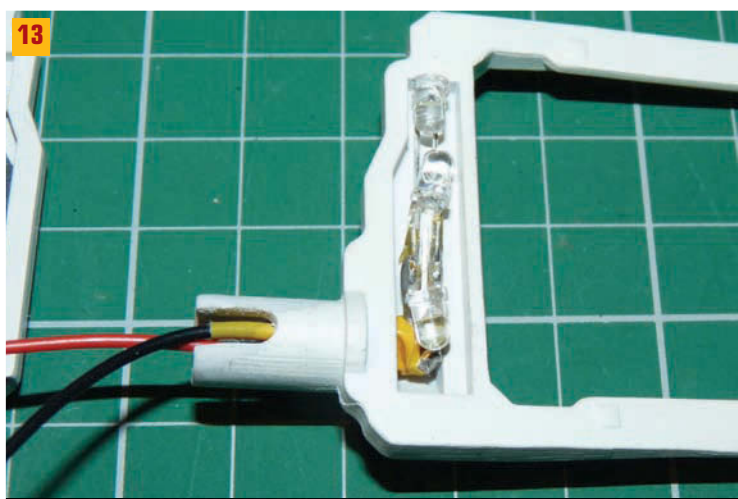
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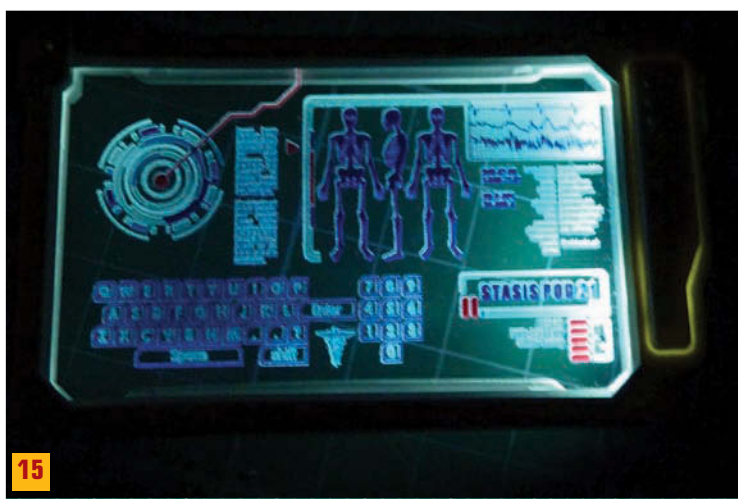
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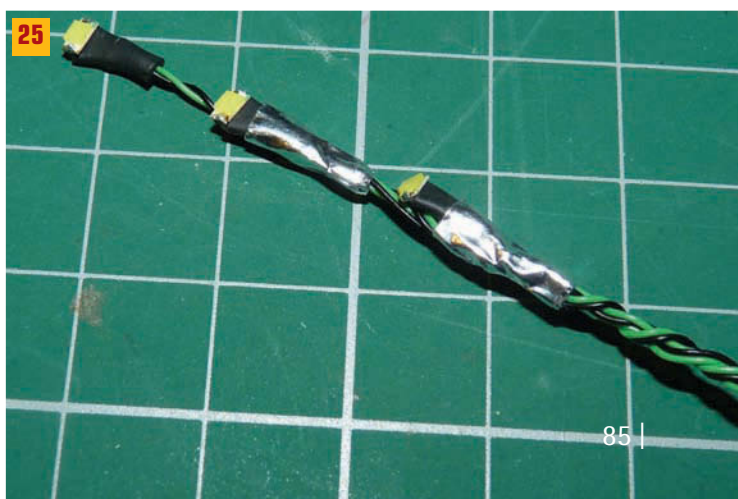
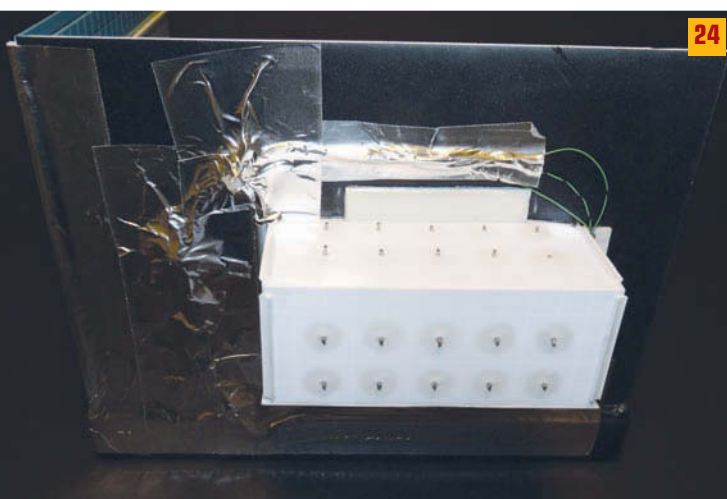
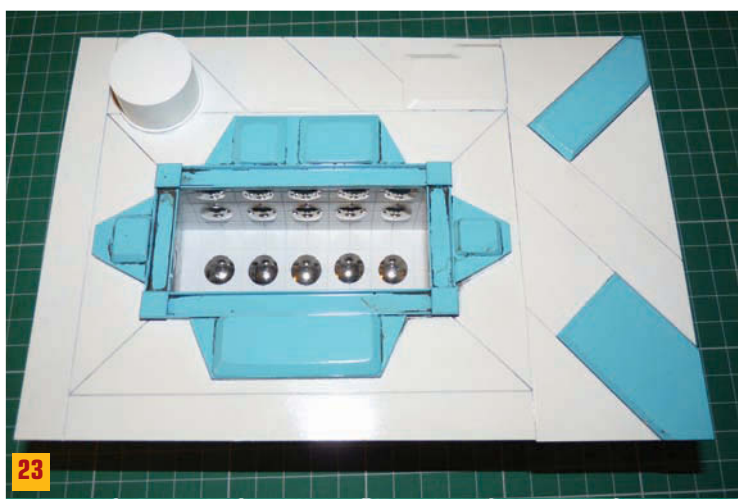
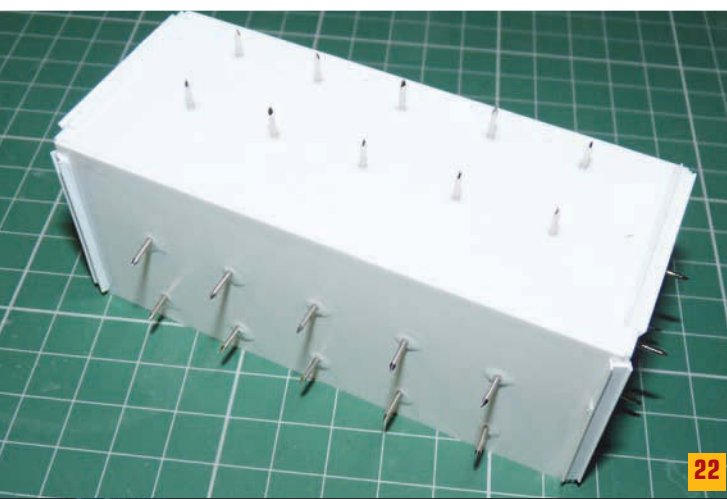
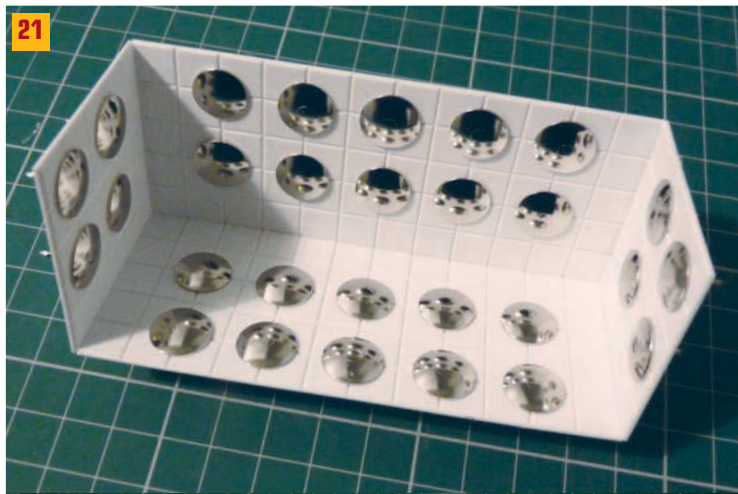
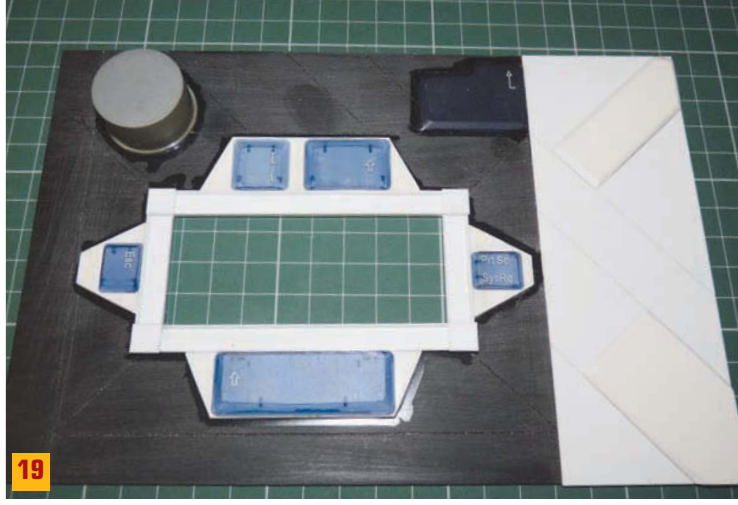
15



16



17





26



27



28



29



30



31

to leave one closed and chose the control panel for the second one in order to have more lights. (7)

Care needs to be taken in cleaning up the open frames from the screens as they are a precise fit with one another and also quite delicate. Although they appear a little warped, this disappears once assembled around the screens themselves. (8)

A nice figure is also included which features optional heads. (9)

The console screens themselves are printed onto a clear acrylic type of material and two sets are provided, one featuring a human subject and a second featuring a *Dall*, one of the alien races prominent in the *Hostile Realms* universe. The pieces have a protective film over them which needs to be peeled off prior to installing in the resin frames. (10)

Construction of the main base parts was very straightforward and the fit of the parts was excellent. Care needs to be taken to fit the correct optional parts depending on where you want cables to exit. I opted to install an LED under the

control panel inside the right-hand pod. I drilled out the controls to allow the light to pass through and filled the holes with *Microscale Kristal Klear* before finishing with *Tamiya* clear colours. A further LED was installed in the central column. (11)

The most challenging aspect of the build was lighting the screens. These are designed to be edge-lit from within the frames. Much head scratching took place as I figured out how to best achieve this given the limited space. In the end I used a combination of super bright 3mm LEDs and some pre-wired SMDs that I sourced from *Model Lighting Solutions* on *Facebook*. (12, 13)

Before assembly, the screen frames were primed and painted white in their component halves with the mating surfaces masked off. The clear parts were then installed along with the lighting, taking great care not to get CA glue on the screens. Once the frames were assembled, the screens were carefully masked before the frame edges were sanded smooth and given a second coat of paint. (14, 15, 16)



The rest of the parts were painted and assembled then the finished screens were installed with all the separate lighting leads fed through a hole in the base.

Given that I intended to display it as a stand alone kit I hunted around for a suitable base. Since I was building this at Christmas-time, an empty plastic chocolate container appeared, so the bottom tray was inverted to form a plinth. This was lined with a sheet of styrene with panel lines scribed in using a steel rule and an *Olfa P-Cutter* which leaves a nice, v-shaped line. (17)

Two walls of the medical bay were constructed and detailed with various items including a number of keys from a broken laptop. One wall features a window looking into a containment booth reminiscent of the med lab on the *Nostromo* in *Alien*. (18, 19, 20)

The booth itself was made from *Evergreen* tile pattern styrene and detailed with chrome plated drawing pins which bounce the light around

inside. The lighting was achieved using some SMDs taped together then glued to the corners of the booth either side of the window and out of sight of the viewer. (21-26)

A figure was created using parts from a *Tamiya Rally Mechanic* set... he's missing his left hand but this isn't obvious from outside... (27, 28, 29)

Finally the resin kit figure was painted to match the box art and installed at his station. Neil Wooding from *Wild House Models* very kindly sent me a sample of the decals from their upcoming *Hover Bike* kit so I employed some of these here. (30-35)

Overall this is another impressive kit from *Wild House* which, in terms of quality and presentation, leaves many of the more established kit makers in the shade. I'm looking forward to seeing this range expand and develop in the future.

Review kit kindly supplied by Wild House Models.
wildhousemodels.com



HOT FROM THE MOULD

continued!

THE AIRBRUSH COMPANY

Iwata Professional Airbrush
Maintenance Tool Kit



With the highly specialised *Iwata Professional Maintenance Tools*, assembling and reassembling airbrush nozzles, caps, needle packings, O-rings and air valves is quick and easy. The kit comes with a two-sided *Iwata Air Valve Guide Wrench*, Soft Jaw Pliers, Needle Packing Screwdrivers (for 1.2mm and 1.4mm diameter needles), Nozzle Wrench, a protective Needle Tube and easy-to-follow instructions with diagrams. All of the items fit securely in the elastic straps within the soft-sided zippered case, with the case having extra room to carry up to three airbrushes. An inner, zipper pouch is ideal for holding small replacement parts.

Pigments, paints
and oils from
Darkstar Miniatures

The *Airbrush Company's* new **Darkstar Pigments** and **Darkstar Molten Metals** range of pigments and paints was developed originally for the wargaming and fantasy modelling market, but make a great addition to the modeller's armoury of paints for *any* genre of modelling.



Darkstar Molten Metals

...are a new range of water-based acrylic metallic paints manufactured to the highest quality to produce the feel of a liquid metal. They are permanent when dry and there is no need for gloss varnishing as they stay bright and glossy and will not tarnish over time. Once fully dry (approx. 24 hours) they can be carefully polished to further improve the shine.

Use of a primer or acrylic base coat is recommended prior to application of these paints, which can also be used through an airbrush with just a 10% water mix and will still remain glossy. They should only be thinned with water (tap water can be used) and should not to be mixed with any alcohol based products. They are fully intermixable and can also be blended with other acrylic paints to create your own metallic colours.

There are 21 colours currently in the range, with 3 more to come.

Priced at £3.00 per 17ml bottle.



Darkstar Pigments

...are a range of fine-ground pigments for weathering. Being so fine, the pigments naturally cling to surfaces and crevices without the need for adhesion agents. Colours in the range include: *Dark Earth, Baked Earth, Sand, Mud, Light Rust, New Rust* and *Rust*.

Priced at £2.50 per 15ml bottle.

Also available in the following sets:

Earth Set 1 (Dark Earth / Earth / Mud).

Earth Set 2 (Red Earth / Baked Earth / Light Earth).

Rust Set (New Rust / Rust / Light Rust).

Sand Set (Sand / Orange Sand / Light Sand).

Price per set of 3 x 15ml bottles: £6.50.





Wilder Weathering Oils

Designed specifically for modellers with higher liquidity than traditional artist's oils and thus easier to apply to models for numerous effects, the oils are fast drying to a completely matt finish.



Wilder Nitroline

Two extremely useful colours are coming to the Wilder NitroLine range: Grease and Old Grease. Wilder NitroLine products are enamel based and can be used straight from the bottle or thinned using enamel thinner. They work best over acrylic finishes.

Sparmax ARISM Mini

A powerful, compact compressor designed for workbench applications whilst saving user space. As a smaller unit, it is also designed to be highly portable and easy to store.



In keeping with its compact nature, the ARISM Mini also has a built-in airbrush holder on its handle and is available in 8 colour options. Features include: working pressure from 0 psi to 28 psi; manual on/off switch; 2m braided hose; pressure adjuster handle with built-in airbrush holder; air flow: 12-14 lpm (0.42-0.49 cfm) at open flow 1/8 BSP outlet on compressor.

Sparmax MAX-4 airbrush

A new airbrush providing exceptional performance with even the smallest compressors because it atomises well at low pressures. It has a 0.4mm needle and nozzle combination for general purpose, high paint flow spraying and wider spray patterns, ideal when spraying thicker or heavier paints whilst still obtaining a fine level of detail. The MAX-4 is dual-action but can be easily converted to a single-action airbrush with the single-action Air Valve that is included. It also features a Pre-set Handle which limits the colour flow to avoid over-shooting and a Crown Cap allowing modellers to get closer to their work and thus achieve finer detail, whilst still protecting the needle.



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Lifecolor Liquid Pigments

New from *the Airbrush Company* is a range of adjustable, odourless washes/filters. **Lifecolor Liquid Pigments** are weathering paints made with the new *Green Chemistry* pigments suspended within the fluid. They come in three main sets

made up of five adjustable washes and a remover that can be used to subtract the pigments once applied. This feature is unique as it gives modellers control over the pigments, allowing them to work with high precision and detail.

www.airbrushes.com



Space:1999 Studio Scale Masterpiece Eagle Collection

Sixteen:12 Collectibles have just announced the release in 2017 of four 44-inch *Space:1999 Eagle* display replicas: a *Transporter Eagle 1*, *Laboratory Pod Eagle*, *Rescue Eagle* and *Winch Pod Eagle*, fully authorised and fully licenced by ITV. Each edition will feature aluminium engine bells, attitude thrusters, etc., and will be limited to 200 copies worldwide, and the reference and advisory team for this project will be headed up by your very own Ed., who is excited to have been invited to oversee accuracy with regard to all aspects of these new replicas. The first – *Transporter Eagle 1* – will be released January, 2017, and will retail for approximately £2,300. Full details and updates can be obtained by contacting: info@sixteen.12.com

Stop Press:

These images just in from a garage kit source of the master for their 30-inch *Thunderbird 4* on the workbench, and which will be available this year. This sneak peek courtesy of the manufacturers – full details still being finalised but we'll let you know as soon as they release them.

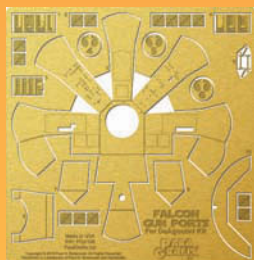


PARAGRAFIX

DeAgostini Millennium Falcon Gun Port Photoetch Set

ParaGrafix have released their fourth item for the *DeAgostini Millennium Falcon* subscription kit: a photoetch and decals set for the upper and lower gun turret stations which completely replaces the kit interiors (except seats and flight gun controls) with exhaustively researched control panels and wall details.

The flat outer wall is replaced with an angled bezel, making viewing the interior easier; through holes allow for easy lighting of the wall controls;



the notched inner walls are included for the ultimate in accuracy, and a guide ensures that the gun port is aligned squarely. Many extra 'X-panels' (used throughout the *Millennium Falcon* sets) are included, as well as numbered panels that can be placed on binders to keep the magazine issues organised. Contains two photoetch frets (one for each gun port) as well as a full colour ALPS printed decal.

The set is available now and has an MSRP of \$62.95.





Reader Project:

War of the Worlds dioramas



Jeff Keith, of Mason, Ohio, USA recently sent in these photographs of two impressive dioramas he created based on the classic 1953 movie *War of the Worlds* and featuring the 1/48 *Martian War Machine* kit from *Pegasus*.

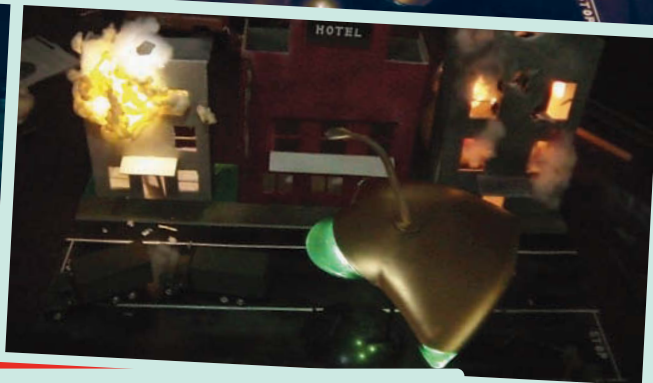
In Keith's first diorama foam board was used as a base with balsa wood buildings and hay wagons, Keith working from a still shot from the movie as reference for the farm. The trees are real branch ends with lichen glued to them and the 'smoke' was created from pillow stuffing material illuminated via the light ports under the ship.

For the city scene Keith again used foam board for the buildings and also for the base, with the road and pavements being painted directly onto this. The 'explosion' is insulating foam in a can, while the 'fire'

and 'smoke' were simulated using pillow stuffing material. Once the fire had been shaped and placed in the windows all that was needed was a little back lighting from inexpensive flashlights to add life to the 'blaze'.

The ship kit did not feature lighting so Keith incorporated a strand of cheap LED lights into his model. He then used very dim lighting to hide the wires coming from the ship and for an overall atmospheric effect. The movie originally showed the ships firing energy beams that looked like 'sparkler sparks'. To replicate this look Keith edited in a red laser beam and truck headlights were also added via the *Paintbrush* program on his PC. No other digital manipulation was employed in the creation of these scenes.





...Got an SF modelling project you're proud of? Like to see it in print? Send your images (at no less than 300 dpi, please) plus an explanation of how you did what you did to info@scififantasymodeller.co.uk and the next *Reader Project* under the spotlight might just be yours.



‘It’s a big one,
but it’s just a fish...’*

... Mike Reccia reels in a dangerous deep sea denizen, courtesy of Studio 2 models

Part One of Two

Studio Scales?

You know the scenario... It’s a dark and stormy night and you lie there, staring at the ceiling, pondering the really big questions in life... will there ever be world peace; why is there always a teaspoon left in the bottom of the washing up bowl; just how big, exactly, were the *Terror Fish* miniatures featured in Gerry Anderson’s classic *Supermarionation* series *Stingray* (...what do you mean, *don’t be so damn stupid and get some sleep, you weird Ander-geek?*).

Whilst the various scales of the titular *Stingray* can clearly be determined in behind the scenes publicity shots taken at the time, nothing that I know of in the way of model shop photographic evidence remains of the ‘*Terror*’ or ‘*Mechanical*’ Fish miniatures. Whether *Studio 2*’s large scale garage kit release of the subject is therefore comparable in size to the originals is unknown... what *is* immediately evident upon opening the box, however, is that this model – at 18.5 inches long when completed – is a *big*, fun, and very

welcome and unusual addition to the Anderson garage kit universe.

Blue-skying to the build ahead I decided I’d like to display my soon to be constructed fishy foe on a replica of the launch gantry seen in certain episodes of the series, and that I’d also like to do something special with the ‘eyes’ in that some kind of interior should be included, rather than the beautifully vacformed eyes provided simply fronting blank and darkened eye sockets. I had originally planned to bite the bullet, drill out the thick fibreglass resin sockets and place sculpted ‘Aquaphibian’ figures (each ‘fish’ was, of course, crewed by two of the evil sea-lord *Titan*’s green, scaly henchmen) in the resulting cavity together with consoles, etc, to represent a cockpit area. Fortunately modelling mate Bob Smith saved me a considerable amount of time and effort in this area by drawing my attention to a build of the kit featured on the internet which had used screen grab photography in the eye sockets, the results of which looked very impressive. Needing to bear in

*(...Phones’ most famous under-statement, prior to a *Terror Fish* attack on *Stingray* – from the pilot episode).

Top: completed kit courtesy *Studio 2*.



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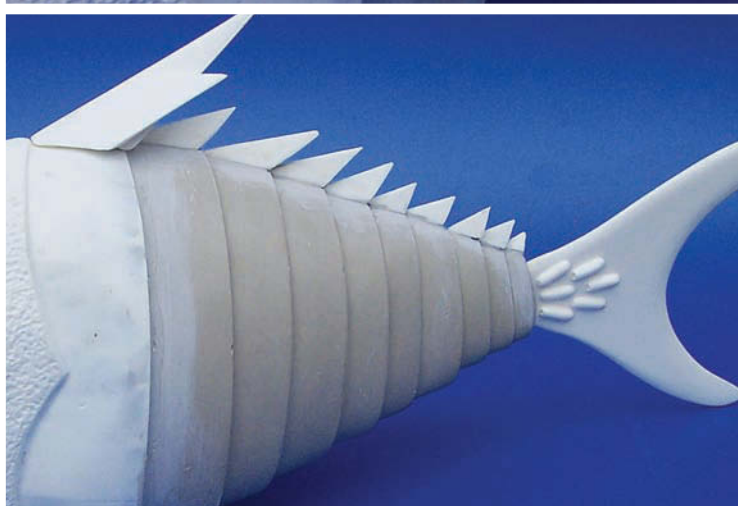
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mind *SF&FM*'s deadlines as ever, I decided to travel this very welcome, faster-lane route when constructing my fish, and to chronicle the build that follows in two parts – the first dealing with the kit and most of its construction, and the second, next issue, covering painting, finishing and the aforementioned stand.

Piscine anatomy

The master for the *Terror Fish* was sculpted by Linda, the talented partner of *Studio 2*'s Mamas Pitsilis, and an impressive job she's done here, too... these two prolific model makers making a formidable creative team. The *Terror Fish* is cast in resin with the head and body sections being backed in fibreglass, and the craft's distinctive lines come together from a head section, a lower jaw piece, rear body section, tail, dorsal fin, two side fins, the various 'spines' that bristle along the top and bottom of the craft, the 'frill' sections that sit behind the head and a pair of clear, vacform 'eyes'.

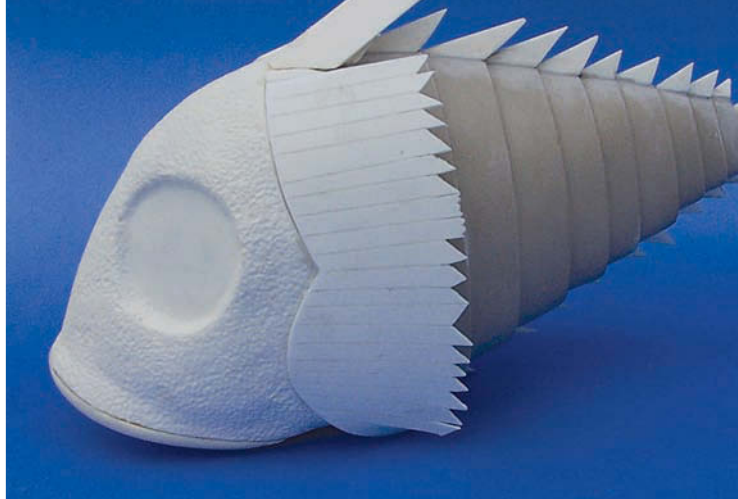
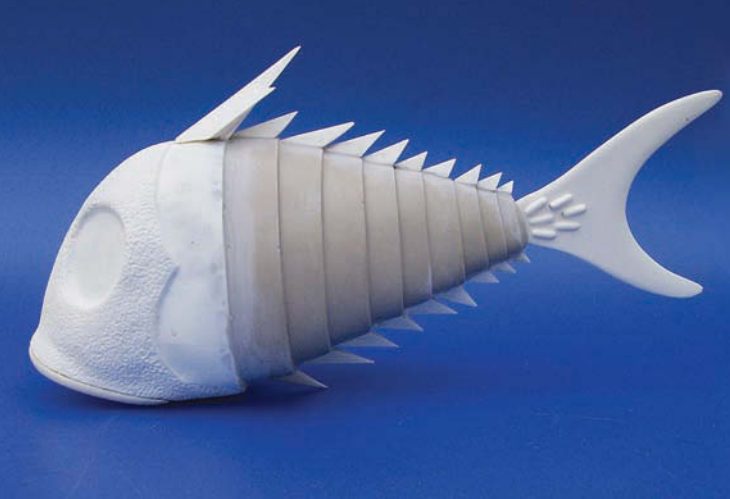
The build

Having no bigger fish to fry (Oh, come on now... like you wouldn't be going with the occasional

fish simile in my shoes!) my first task was to join the head and body sections of the kit together. This was accomplished via the use of two-part epoxy, and revealed a number of gaps along the join once the two parts were together. As these holes would be mostly hidden by the frill sections at a later stage eliminating them was not absolutely essential, but I'd know they were there even if I couldn't see them (OCD, you see) so applied *P38* car filler all around the join and sanded back to a smooth finish, its use also adding strength to the assembly.

With the head and body together and neat I added the jaw piece. Some modellers might want to position this in a 'hinged open' position as though the fish is ready to fire a missile, but I prefer the look of the craft in tight-lipped mode, so simply epoxied the piece shut against the head.

At the other end of the fish I drilled a hole in the connecting surface of the one-piece tail (having first sanded its edges smooth) and a corresponding hole in the centre of the indented rear of the body, inserted a length of sprue into the hole in the tail, liberally doused in two-part epoxy, then epoxied the tail to the body.



The dorsal fin was next, and the base of this, once surrounding resin flash had been removed, needed to be drilled out with the mini-drill and shaped to fit the curved contours at the top of the head where it locates. An exact match was not necessary as any gaps around the base of the piece, where the fin connects to the top of the head, would be covered once the 'frills' were in place. Again, two-part epoxy was used to ensure a strong join.

Next up was the most demanding aspect of this build, time-wise... A row of smaller fins or spines feature along the top and bottom of the fish, these diminishing in size as they approach the tail. The parts for these, in various descending sizes, are supplied still attached to their surrounding (and quite thick) flash and my first task was therefore to snip each fin from its resin 'skirt' using a pair of sprue cutters before sanding away the excess resin from its base. The real work then began in shaping the underside of each fin to match the compound curves of the top and bottom of the fish that it would be attached to. The bottoms of the fins are flat, rather than being indented to sit snugly over the top and bottom lines of the body, and so the base of each fin needed to have a 'V' shape filed into it before it could be attached to its location with superglue. One all eighteen spines were in place the gaps between their edges and the body were then filled with P38 car filler. Once set, this was sanded back to match the contours of the fish at each side, this fill and sand exercise being repeated twice more until each fin had been blended in and appeared to be an integral part of the craft. All in all the process took around six hours to complete.

Frills

The *Terror Fish* sports a large 'frill' or 'ruff' of spines just behind its head, and these are supplied as two pieces of flat, thin resin, scored on one side

to represent the edges of the spines, and shaped at their front edges to sit against the recess to the rear of the eye socket to each side of the head. In order to make these conform to the curves of the rear of the head I immersed them in very hot water until they were quite bendy, pushed them against the recesses to the rear of the head, applied pressure so that they took on the head's contours then ran them under a cold tap to fix them in their new configurations. Prior to this operation I had also cut part way along some of the scored spine edge lines with a razor saw so that the tops of certain spines stood slightly proud of the frill, giving the impression that it was made up of individual components rather than being one long, continuous piece.

When I was satisfied with the shape of the frill pieces, and having cut away a centimetre or so of their top edges to allow for the location of the dorsal fin at the top of the head, I attached the frills using a combination of superglue and two-part epoxy. The final step was to use cut down sections of the top edge pieces that I'd cut away from the frills to fill in the gaps between the top edges of the frills and leading edges of the dorsal fin.

Next up in the build order, completing it, would be the two side fins and the transparent 'eyes'. However, the fish would need to be painted before these parts could be added, and you'll discover how the paint stage progressed for me, plus how I fared regarding construction of a stand for the craft, next time round, when I'll no doubt be angling for compliments (sorry)...

...Therefore please do join me in Volume 42 for a conclusion to this exciting fish tale (sorry again)...

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